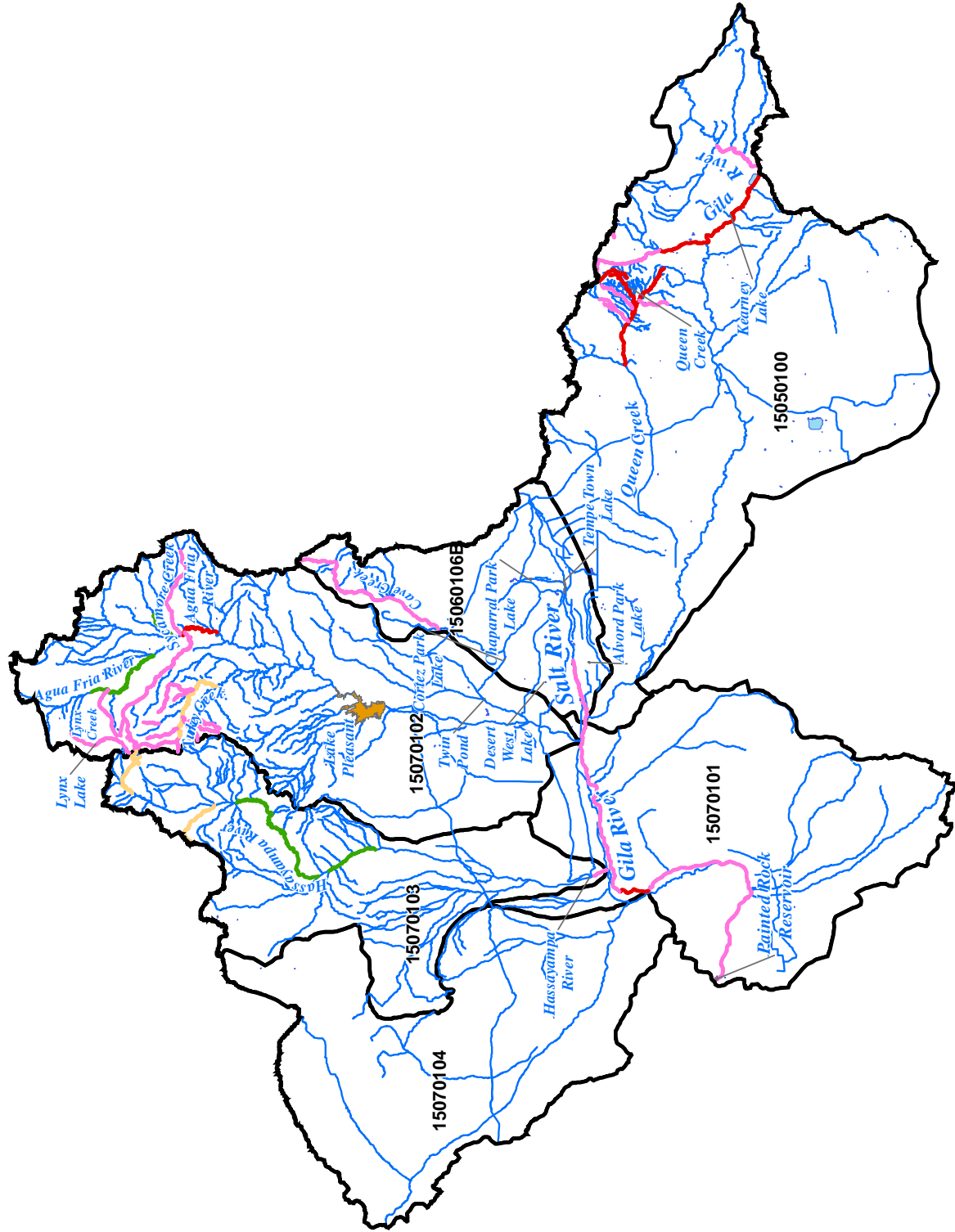


Middle Gila Watershed 2012/2014 Assessment for Streams and Lakes



Legend

Assessed Lakes - 2012

ADEQ and EPA Listings

- Attaining
- Inconclusive
- Not Attaining
- EPA Impaired
- Impaired

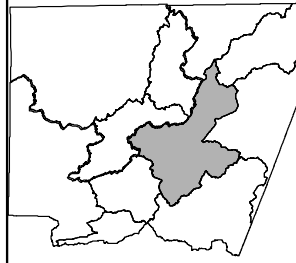
HUC Watershed Boundaries

Assessed Streams - 2012

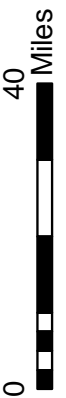
ADEQ and EPA Listings

- Attaining
- Inconclusive
- Not Attaining
- EPA Impaired
- Impaired

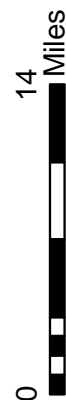
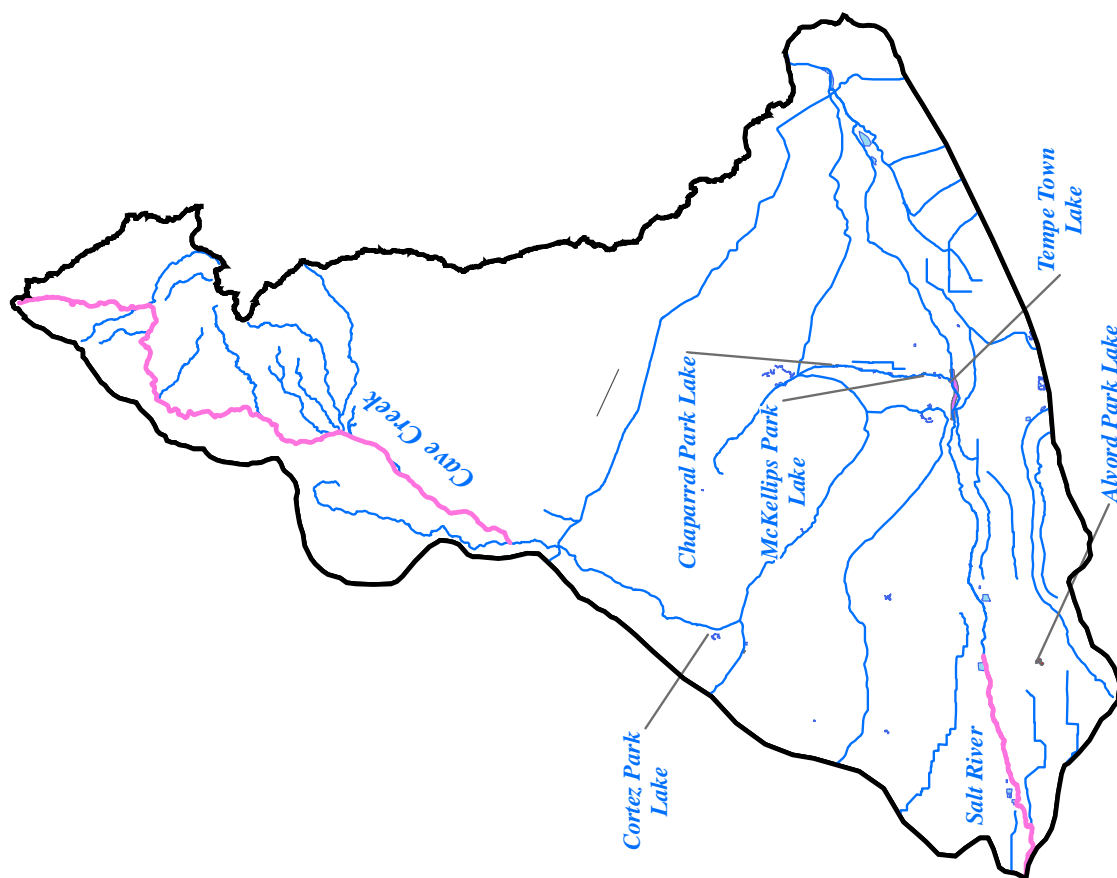
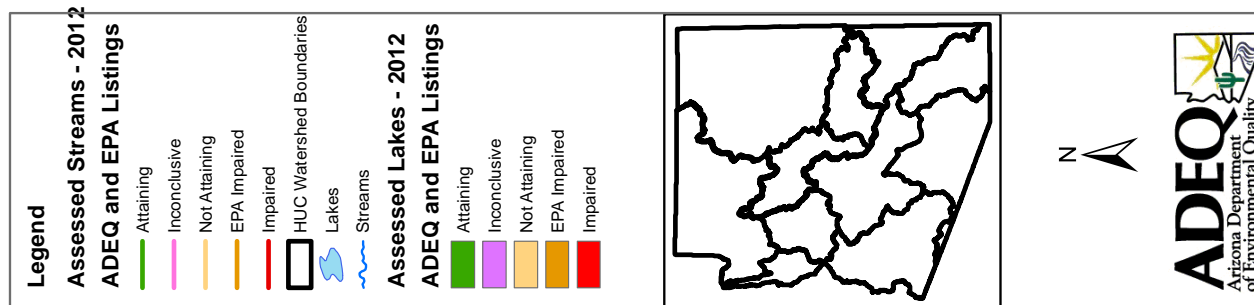
- Lakes
- Streams



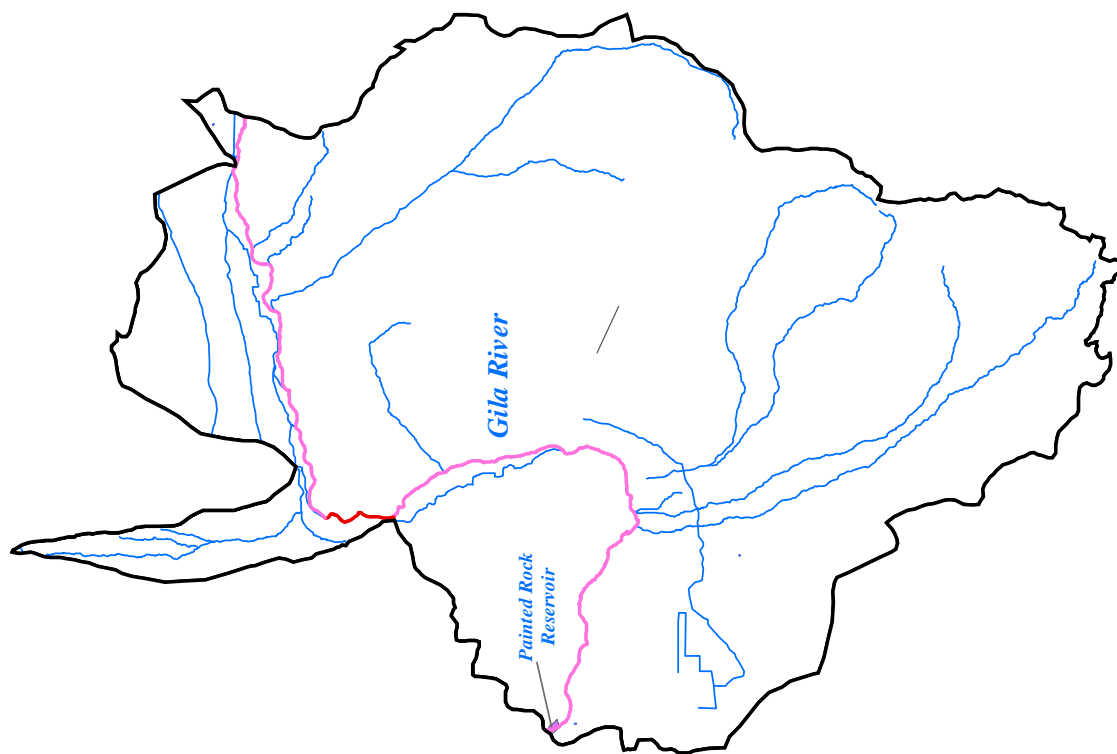
See Individual HUC Printouts
for Waters not Labeled



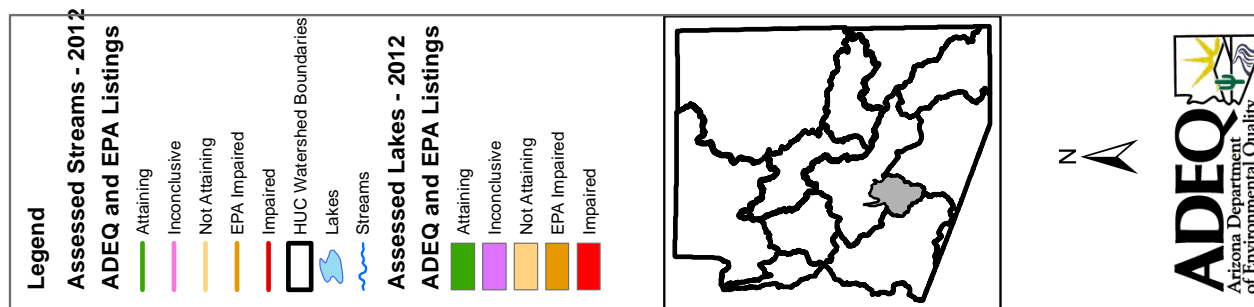
Middle Gila Watershed HUC 15060106B 2012/2014 Assessment for Streams and Lakes



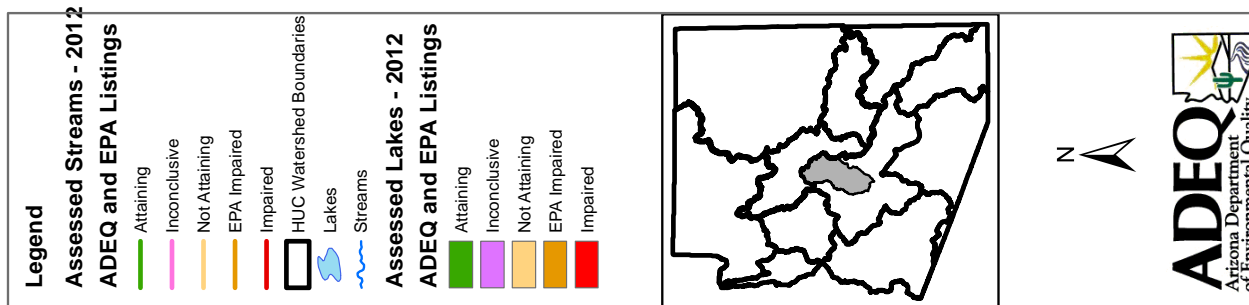
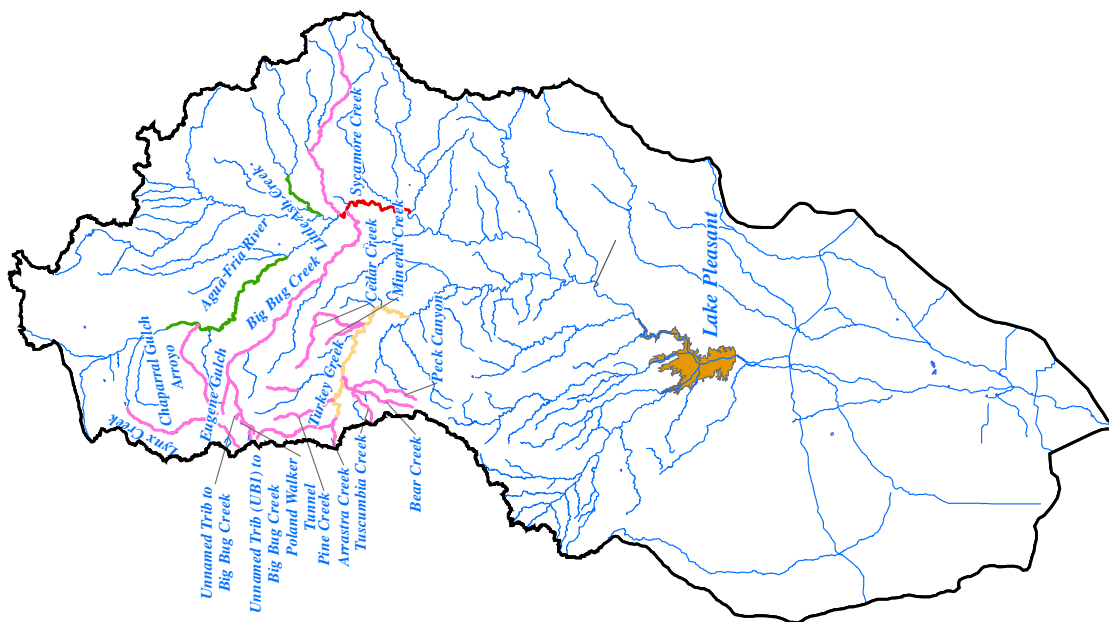
Middle Gila Watershed HUC 15070101 2012/2014 Assessment for Streams and Lakes



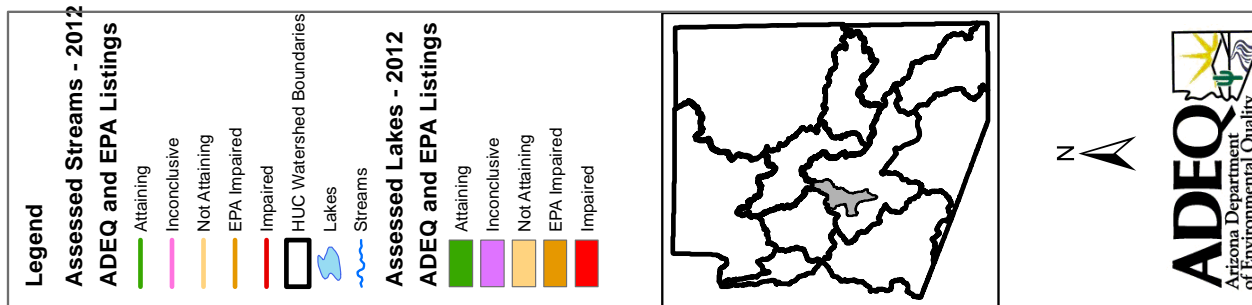
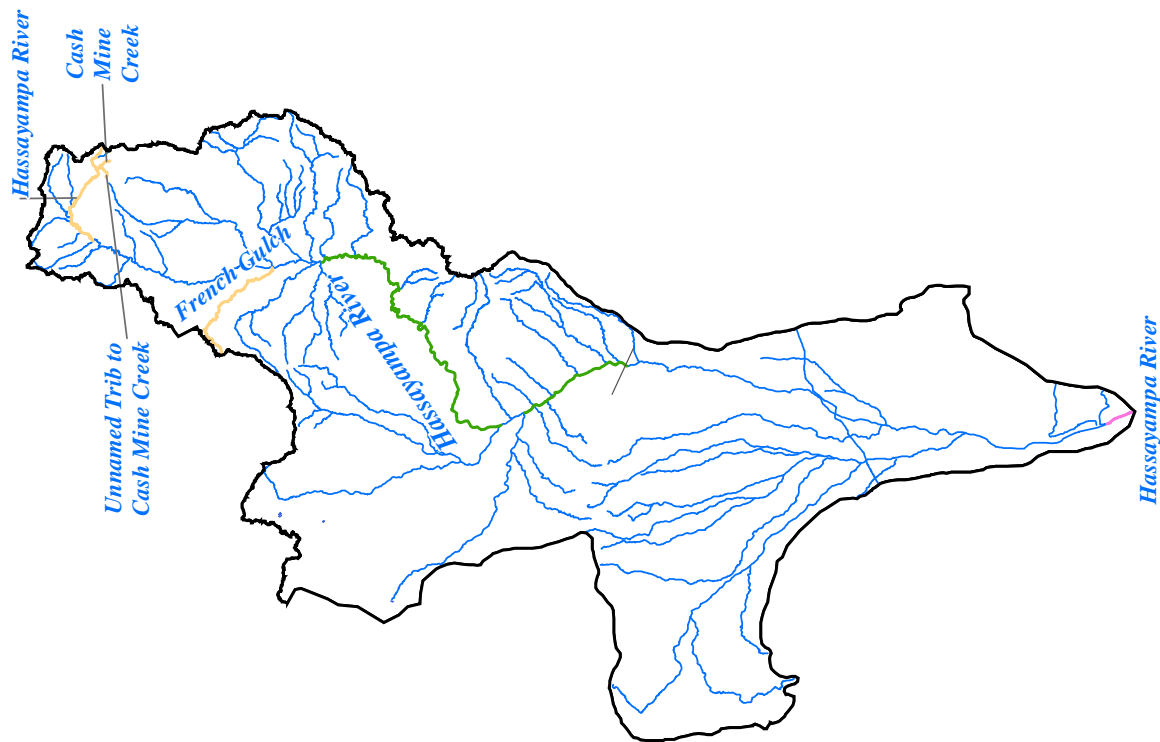
0 22 Miles



Middle Gila Watershed HUC 15070102 2012/2014 Assessment for Streams and Lakes



Middle Gila Watershed HUC 15070103 2012/2014 Assessment for Streams and Lakes



A GUA FRIA RIVER

Sycamore Creek - Bishop Creek
15070102-023
9.1 Miles

Category 5
Impaired

E. coli (2010)

DWS - Inconclusive • FC - Attaining • FBC - Impaired
AGI - Attaining • AGL - Attaining • A&Ww - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	10 ug/L	8/13/2008	16 ug/L	DWS is inconclusive with 1 exceedance in 4 samples (binomial).
<i>E. coli</i>	235 cfu/100 mL, SSM	9/11/2008	533 cfu/100 mL	FBC remains impaired with two exceedances in the last three years of the assessment period (7/08-6/11).
		10/20/2008	310 cfu/100 mL	

Monitoring Summary

Sampling period: 8/13/2008 - 4/6/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW USGS GAGE 09512500	MGAFR087.06	100710	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Arsenic
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more <i>E. coli</i> to support TMDL development and arsenic due to exceedances. Good core parameter coverage with small number of samples.

Impairment Discussion
<i>Remains impaired for E. Coli (2010).</i>

A GUA FRIA RIVER

State Route 169 - Yarber Wash
15070102-031B
17.8 Miles

Category 2
Attaining some uses

DWS - Attaining • FC - Attaining • FBC - Inconclusive
AGI - Attaining • AGL - Attaining • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 ml, SSM	9/11/2008	690 cfu/100 mL	FBC is inconclusive with 1 exceedance in 4 samples.

Monitoring Summary

Sampling period: 8/13/2008 - 4/6/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CHAPARRAL GULCH	MGAFR110.01	106462	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	Dissolved oxygen
Missing Seasonal Distribution	Dissolved oxygen
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect additional <i>E. coli</i> samples due to the exceedance. Collect more dissolved oxygen to represent 3 seasons over the assessment period to complete core parameter coverage.

IMPAIRMENT STATUS

Ammonia (2004)

FC - Attaining • PBC - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	9/10/2008	5.19 mg/L	A&Ww is inconclusive with 1 exceedance in 6 samples (binomial).
pH	9.0 SU	5/14/2009	9.7 SU	A&Ww and PBC are inconclusive with 2 exceedances in 6 samples (binomial).
		8/6/2009 8	9.3 SU	

Monitoring Summary

Sampling period: 9/21/2006 - 8/6/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
MID LAKE	MGALV-C	101042	ADEQ	CLP
INFLOW	MGALV-A	101040	AGFD	CLP
WEST LAGOON	MGALV-WEST	102563	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(3-8) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(12) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(13-14) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen, pH
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more pH and dissolved oxygen due to exceedances. TMDL sampling completed.

Impairment Discussion
Remains impaired for ammonia (2004). Two exceedances in 2005 (2010 assessment) but no ammonia exceedances in this assessment period in 12 samples. TMDL development ongoing.

IMPAIRMENT STATUS

Copper (2010)

FC - Attaining • FBC - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Chromium	100 ug/L	7/22/2007	107 ug/L	FBC is inconclusive with 1 exceedance in 8 samples (binomial).
Copper ^d	24 mg/L ^{acute} @ 87 mg/L hardness & 10.5 ug/L ^{chronic} @ 120 mg/L hardness	8/6/2007	11.8 mg/L (worst case)/ 11 ug/L (median)	A&Ww remains impaired with 3 chronic exceedances in 9 samples.
	10.0 ug/L ^{acute} & 6.7 ug/L ^{chronic} @ 72 mg/L hardness	12/8/2007	12 ug/L (max) 11 ug/L (median)	
	9.1 ug/L ^{acute} & 6.3 ug/L ^{chronic} @ 66 mg/L hardness	1/7/2008	9.8 ug/L	
Lead	15 ug/L	3/23/2007	52.3 ug/L	FBC is inconclusive with 8 exceedances in 9 samples (binomial requires 20 samples for impairment).
		7/22/2007	270 ug/L	
		7/23/2007	123.4 ug/L	
		8/6/2007	52.3 ug/L	
		8/16/2007	108 ug/L	
		12/8/2007	23.6 ug/L	
		1/7/2008	76.3 ug/L	
		1/21/2010	28.8 ug/L	
SSC	80 mg/L	3/23/2007	337 mg/L	A&Ww is inconclusive. 2 non-storm single sample exceedances (3/23/07 and 1/28/08) but not enough samples to calculate a median.
		7/22/2007	1771 mg/L	
		8/16/2007	1060 mg/L	
		12/8/2007	200 mg/L	
		1/7/2008	2204 mg/L	
		1/28/2008	868 mg/L	

Monitoring Summary

Sampling period: 3/23/2007 - 1/21/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CONFLUENCE WITH QUEEN CREEK	MGARN000.11	103503	ADEQ	TMDL
ABOVE CONFLUENCE WITH TRIBUTARY 1	MGARN008.31	106222	ADEQ	TMDL
ABOVE CONFLUENCE WITH WOOD CANYON	MGARN005.52	107842	ADEQ	TMDL
ABOVE CONFLUENCE WITH TELEGRAPH CANYON	MGARN003.84	107823	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(9-11) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(2-8) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead, chromium, SSC
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Dissolved oxygen, pH, <i>E. coli</i>
Lab Detection Limits Not Low Enough	Copper (dissolved), selenium, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more chromium, lead, and SSC samples due to exceedances. Collect missing core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
Remains impaired for copper (2010). Included as part of Queen Creek TMDL project.

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 2/25/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE MOUTH POINT NEAR CORRAL	MGARS000.04	107783	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

BEAR CREEK

Headwaters - Turkey Creek
15070102-046
8.1 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 11/28/2006 - 2/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
0.3 MILES SOUTH OF TURKEY CREEK CORRAL SITE	MGBEA001.08	104882	ADEQ	TMDL
DS OF TUSCUMBIA CREEK, US OF MOUTH PECK CANYON	MGBEA002.08	107703	ADEQ	TMDL
MID-STREAM (4X4 ACCESSIBLE)	MGBEA003.05	105347	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	9.6 ug/L @ 108 mg/L hardness	1/22/2010	10.1 ug/L	A&Ww is inconclusive with 1 exceedance in 2 samples.
Lead	15 ug/L	1/22/2010	23 ug/L	FBC is inconclusive with 1 exceedance in 2 samples (binomial).

Monitoring Summary

Sampling period: 1/22/2010 - 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT SOUTH SPRING LANE	MGBGB009.57	107763	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-2) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved), lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	Mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more lead and dissolved copper due to exceedances. All core parameters need sample and seasonal distribution coverage.

BIG BUG CREEK

Headwaters - Eugene Gulch
15070102-034A
5.7 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT FS ROAD 261 TRAIL BRIDGE	MGBGB028.27	108102	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, selenium, zinc	None	(1) pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period. Use lower lab reporting limits for dissolved cadmium and lead.

CASH MINE CREEK

Headwaters - Hassayampa River
15070103-349
1.0 Miles

Category 4A
Not Attaining

Middle Gila

Cadmium, copper, and zinc (2002)

FC - Inconclusive • FBC - Inconclusive
A&Wc - Not Attaining

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW CASH MINE	MGCSM000.47	100832	ADEQ	Fixed Station Network
BELOW ROAD	MGCSM000.29	100833	Weston, ADEQ	TMDL, Fixed Station Network
NEAR MCCLEUR TAIL-INGS	MGCSM000.34	102818	ADEQ, Weston	TMDL, WQRF

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Conduct effectiveness monitoring after TMDL strategies have been implemented.

Impairment Discussion
Included in the Hassayampa River TMDL (2002).

CAVE CREEK

Headwaters - Cave Creek Dam
15060106B-026A
32.909 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 4/23/2009 - 11/18/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW SEVEN SPRINGS	MGCVE037.68	100527	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	(2) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

CEDAR CANYON (CEDAR CREEK)

Headwaters - Turkey Creek
15070102-053
11.6 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	15 ug/L	12/22/2010	42.7 ug/L	PBC is inconclusive with 1 exceedance in 2 samples (binomial).

Monitoring Summary

Sampling period: 7/20/2006 - 12/22/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NORTH OF MINERAL CREEK MOUTH	MGCED000.25	102522	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-2) Arsenic, boron, chromium, copper, lead, manganese, mercury	None	(1) Dissolved oxygen, pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect lead samples due to the exceedance. Collect core parameters to represent at least 3 seasons during an assessment period.

CHAPARRAL GULCH ARROYO

Headwaters - Agua Fria
15070102-739
9.9 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	15 ug/L	1/22/2010	205 ug/L	PBC is inconclusive with 1 exceedance in 1 sample (binomial).
Zinc ^d	1509 ug/L @ 143 mg/L hardness	1/22/2010	4900 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 1/22/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW IRON KING MINE	MGCGA001.32	107762	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Zinc (dissolved), lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Not enough data to assess. Collect more lead and dissolved zinc due to exceedances. Collect at least 3 of each core parameter to represent 3 seasons over assessment period.

E. coli and low dissolved oxygen (2004)

FC - Attaining • PBC - Attaining • AGI - Attaining
A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Ammonia	0.31 mg/L @ pH 8.8 and temp 26.1 °C	5/13/2009	1.2 mg/L	A&Ww is inconclusive with 1 exceedance in 4 samples.
Dissolved oxygen	6.0 mg/L	9/8/2008 9	4.51 mg/L	A&Ww remains impaired with 1 exceedance in 5 samples (binomial).

Monitoring Summary

Sampling period: 9/8/2008 - 8/5/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT DAM	MGCHA-A	101045	ADEQ	TMDL
MID LAKE	MGCHA-B	101046	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-5) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(7) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(10) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Ammonia
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect more ammonia samples due to the exceedance.

Impairment Discussion
Remains impaired for dissolved oxygen and <i>E. coli</i> (2004). Five <i>E. coli</i> samples taken in this assessment period (08-09) with no exceedances. TMDL sampling completed. Developing TMDL report.

Dissolved oxygen and pH (2004)

FC - Attaining • PBC - Impaired • AGI - Impaired
A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
pH	9.0 SU	5/13/2009	9.4 SU	AGI, A&Ww, and AGI remain impaired with 1 exceedance in 5 samples.

Monitoring Summary
Sampling period: 9/4/2008 - 8/5/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT DAM	MGCOR-A	101043	ADEQ	TMDL
MID LAKE	MGCOR-B	101044	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(2-8) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, zinc	(6-8) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(10) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Conduct effectiveness monitoring after TMDL strategies have been implemented.

Impairment Discussion
Remains impaired for dissolved oxygen and pH (2004). TMDL sampling completed.

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	3.64 µg/L ^{acute} , 2.74 µg/L ^{chronic} @ 23 mg/L hardness	12/11/2007	12 µg/L	A&Ww chronic is inconclusive with 1 exceedance in the assessment period.

Monitoring Summary

Sampling period: 12/11/2007

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT US 60	MGDVC009.11	105979	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	None	(1) SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Insufficient sampling event and seasonal coverage. Collect more dissolved copper samples due to the exceedance.

EUGENE GULCH
 Headwater - Big Bug Creek
 15070102-768
 3.1 Miles

Category 3
 Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	13.2 ug/L @ 55 mg/L hardness	3/9/2010	50.9 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE POLAND JUCTION ROAD	MGEUG000.75	108103	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, selenium, zinc	None	(1) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect more dissolved copper due to the exceedance. All core parameters need sample number and seasonal distribution coverage.

Cadmium, copper, and zinc (2004)

FC - Inconclusive • FBC - Inconclusive
A&Ww - Not Attaining

Monitoring Summary
Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE ZONIA GULCH	MGFRG008.19	102235	ADEQ	TMDL
AT HEADWATERS	MGFRG010.13	102086	ADEQ	TMDL
BELOW HEADWATERS	MGFRG010.33	102234	ADEQ	TMDL
BELOW UPPER WASTE ROCK PILE	MGFRG009.59	102087	ADEQ	TMDL
ABOVE HASSAYAMPA RIVER	MGFRG000.19	102084	ADEQ	TMDL
ABOVE PLACERITA GULCH	MGFRG007.06	101649	ADEQ	TMDL
ABOVE ZONIA MINE	MGFRG009.79	101619	ADEQ	TMDL
BELOW PLACERITA GULCH	MGFRG006.95	101650	ADEQ	TMDL
BELOW ZONIA GULCH	MGFRG008.09	101620	ADEQ	TMDL
WESTERN TRIB ABOVE ZONIA MINE	MGFRG010.19	102085	ADEQ	TMDL
ABOVE ZONIA MINE	MGFRG010.14	102088	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Conduct effectiveness monitoring after TMDL strategies have been implemented.

Impairment Discussion
Remains not attaining for copper, cadmium and zinc. French Gulch TMDL completed in 2005.

IMPAIRMENT STATUS

SSC (2006/8)

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
SSC	80 mg/L	9/16/2008	98 mg/L	A&Ww remains impaired. The exceedance on 5/13/09 occurred during a storm event and was excluded from assessment.
		1/14/2009	87.5 mg/L	
		5/13/2009	93 mg/L	

Monitoring Summary

Sampling period: 9/16/2008 - 5/13/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT KELVIN, AZ USGS 09474000	MGGLR313.73	100748	USGS	USGS

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Copper (dissolved)
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more SSC samples to support TMDL development.

Impairment Discussion
Remains impaired for SSC (2006/8)

AGI - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive • FBC - Inconclusive • FC - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/7/2006 - 10/4/2006

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW ASH CREEK	MGGLR337.14	104638	ADEQ	Special Studies

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	(1-2) <i>E. coli</i> , pH, turbidity

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	pH, boron, manganese, copper, lead, zinc (dissolved), dissolved oxygen, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	pH, boron, manganese, copper, lead, zinc (dissolved), dissolved oxygen, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Many core parameters need seasonal distribution and/or sample number coverage as well (at least 3 samples representing 3 seasons).

GILA RIVER

Centennial Wash - Gillespie Dam
15070101-008
5.3 Miles

Category 5
Impaired

Boron (1992), selenium (2004)

PBC - Inconclusive • FC - Inconclusive • A&Wedw - Impaired
AGL - Inconclusive • AGI - Impaired

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE DIVERSION AT GILLESPIE DAM USGS 09518000	MGGLR167.44	100734	USGS	USGS

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more samples to support TMDL development.

Impairment Discussion
Remains impaired for boron and selenium. Overfile listing for pesticides in fish tissue by EPA in 2002. ADEQ proposes delisting this reach for pesticides based on recent fish tissue and water quality data.

GILA RIVER SITES

Salt River - Painted Rock Reservoir
15070101 (multiple reaches)
77.2 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • FC - Inconclusive • A&Wedw - Inconclusive
AGL - Inconclusive • AGI - Inconclusive

Sites Summary

Sampling period: No current data

HUC-reach	Reach Description	Miles
15070101-015	Salt River - Agua Fria River	3.7
15070101-014	Agua Fria River - Waterman Wash	11.9
15070101-010	Waterman Wash - Hassayampa River	13.9
15070101-009	Hassayampa - Centennial Wash	7
15070101-007	Gillespie Dam - Rainbow Wash	5.1
15070101-005	Rainbow Wash - Sand Tank	16.9
15070101-001	Sand Tank - Painted Rock Reservoir	18.7

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect samples to determine designated use attainments.

Delisting of Previous Impairment
ADEQ proposes delisting these reaches (2002 EPA overfiles) based on recent fish tissue and water quality data..

HASSAYAMPA RIVER

Buckeye Canal - Gila River
15070103-001B
2.3 Miles

Category 2

Attaining some uses

FC - Inconclusive • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 ml, SSM	5/14/2009	808 cfu/100 mL	FBC is inconclusive with 1 exceedance in 3 samples.
SSC	80 mg/L	1/13/2009	1511 mg/L	A&Ww is attaining with no median exceedances in 7 samples.
		5/14/2009	116 mg/L	

Monitoring Summary

Sampling period: 9/15/2008 - 5/14/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE GILA RIVER	MGHSR000.77	101197	ADEQ	Ambient
NEAR ALINGTON, AZ USGS 09517000	MGHSR002.67	101496	USGS	USGS

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc	(3-6) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrite/nitrate, nitrogen, phosphate, phosphorus, total Kjeldahl nitrogen	(3-7) Dissolved oxygen, <i>E. coli</i> , hexachlorocyclohexane delta, isophorone, naphthalene, nitrobenzene, nitrophenol, pH, phenol, pyrene, SSC, simazine, total dissolved solids, trichlorobenzene

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	Copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect more <i>E. coli</i> samples to assess attainment. Collect more dissolved metals (cadmium, copper, zinc) covering 3 seasons over assessment period. Many organic parameters being monitored have detection limit issues (too many to list).

Delisting of Previous Impairment
Previously impaired for pesticides in fish tissue (2002, EPA). ADEQ proposes delisting based on recent fish tissue and water quality data.

HASSAYAMPA RIVER

Cottonwood Creek - Martinez Wash
15070103-004
32.1 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/12/2008	5.46 mg/L	A&Ww is inconclusive with 1 exceedance in 3 samples (binomial).

Monitoring Summary

Sampling period: 8/12/2008 - 4/7/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT BLM GAGE, BOX CANYON DAM	MGHSR058.80	100463	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury, nickel (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more dissolved oxygen samples due to exceedance. Good core parameter coverage with small number of samples.

H ASSAYAMPA RIVER

Headwaters - Copper Creek
15070103-007A
11.0 Miles

Category 4A
Not Attaining

Middle Gila

Low pH(2006/8) and zinc, cadmium, and copper (1992)

FC - Attaining • FBC - Not Attaining • AGI - Not Attaining
AGL - Not Attaining • A&Wc - Not Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Cadmium ^d	0.37 ug/L ^{chronic} @ 180 mg/L hardness	2/15/2007	2.8 ug/L	A&Wc remains not attaining.
	0.51 ug/L ^{chronic} @ 280 mg/L hardness	10/20/2008	3.3 ug/L	
	2.2 ug/L ^{acute} , 0.26 ug/L ^{chronic} @ 110 mg/L hardness	2/4/2009	3.9 ug/L	
	2.8 ug/L ^{acute} , 0.31 ug/L ^{chronic} @ 140 mg/L hardness	4/7/2009	5.8 ug/L	
Copper ^d	15.9 ug/L ^{acute} , 10.5 ug/L ^{chronic} @ 180 mg/L hardness	2/15/2007	18 ug/L	A&Wc remains not attaining.
	14.7 ug/L ^{acute} , 9.7 ug/L ^{chronic} @ 110 mg/L hardness	2/4/2009	36 ug/L	
	18.5 ug/L ^{acute} , 11.9 ug/L ^{chronic} @ 140 mg/L hardness	4/7/2009	38 ug/L	
Zinc ^d	192 ug/L @ 180 mg/L hardness	2/15/2007	370 ug/L	A&Wc remains not attaining.
	127 ug/L @ 110 mg/L hardness	2/4/2009	260 ug/L	
	156 ug/L @ 140 mg/L hardness	4/7/2009	290 ug/L	

Monitoring Summary

Sampling period: 2/15/2007 - 4/7/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DOWNSTREAM OF WET- LAND MINE BABBLE	MGHSR113.86	100942	WESTN	TMDL
LOWER WOLF CREEK CAMPGROUND	MGHSR110.58	106662	ADEQ	Ambient
AT SENATOR MINE ADIT	MGHSR113.01	101084	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(3-5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more cadmium, copper, and zinc samples to assess on the ground improvements. Good core parameter coverage with small number of samples.

Impairment Discussion
TMDL for cadmium, copper, zinc completed and approved in 2002. On the ground improvements meant to improve metal concentrations may have improved pH levels – no pH exceedances in this assessment period.

HASSAYAMPA RIVER

Sols Wash - 8 Miles Below Wickenburg
15070103-002A
9.2 Miles

Category 2
Attaining some uses

Middle Gila

FC - Attaining • FBC - Attaining • AGI - Inconclusive
AGL - Attaining • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/15/2008	5.22 mg/L	A&Ww is inconclusive with 2 exceedances in 4 samples (binomial).
		2/4/2009	5.63 mg/L	
Manganese	10000 ug/L	8/15/2008	77000 ug/L	AGI is inconclusive with 1 exceedance in 4 samples (binomial).
Bottom Deposits	< 50%	10/22/2008	59%	A&Ww is inconclusive with 1 exceedance.

Monitoring Summary

Sampling period: 8/15/2008 - 6/4/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT NATURE CONSERVANCY	MGHSR048.20	100462	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids, bottom deposits

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Manganese, dissolved oxygen, bottom deposits
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more manganese, dissolved oxygen, and bottom deposits samples due to exceedance. Good core parameter coverage with small number of samples.



LAKE PLEASANT

15070102-1100
8000 Acres

Category 5
Impaired

Mercury in fish tissue (EPA 2006/8)

FC - Impaired • FBC - Inconclusive • DWS - Inconclusive
A&Ww - Inconclusive • AGL - Inconclusive • AGI - Inconclusive

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AGUA FRIA ARM	MGPLE-AGUA	102553	AGFD	Ambient
AT DAM	MGPLE-A	100067	ADEQ	TMDL
AT RIVERINE ZONE	MGPLE-C	101708	UA, ADEQ	CLP
CASTLE CREEK	MGPLE-CSTL	102554	ADEQ	TMDL
MARINA	MGPLE-MAR	101000	UA, ADEQ	CLP
MID LAKE	MGPLE-B	100068	ADEQ	CLP, TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development.

Impairment Discussion
Remains impaired for mercury in fish tissue (2006/8).

LITTLE ASH CREEK (LAS)

Headwaters - Ash Creek
15070102-039
17.7 Miles

Category 2

Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	8/14/2008	250 cfu/100 mL	FBC is inconclusive with 1 exceedance in the last 3 years of monitoring.

Monitoring Summary

Sampling period: 8/14/2008 - 4/8/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR ESTLER PEAK	MGLAS004.52	100578	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more <i>E. coli</i> samples due to the exceedance.

LITTLE WOLF CREEK

Headwaters - Wolf Creek
15070102-834
3.0 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 2/25/2010 - 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE HIGHWAY 177 CROSSING	MGLWL000.32	107784	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-2) Arsenic, boron, copper, lead, manganese	None	(2) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.



LYNX CREEK

Headwaters - Unnamed Trib at 343429/1122105
15070102-033A
13.1 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Cadmium ^d	1.3 ug/L ^{acute} , 0.19 ug/L ^{chronic} @ 66 mg/L hardness	3/9/2010 3	5.7 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Copper ^d	9.1 ug/L ^{acute} , 6.3 ug/L ^{chronic} @ 66 mg/L hardness	3/9/2010 3	75.6 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Lead	15 ug/L	3/9/2010 3	18.5 ug/L	FBC is inconclusive with 1 exceedance in 1 sample (binomial).
Zinc ^d	82 ug/L @ 66 mg/L hardness	3/9/2010 3	540 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT PINE MOUNTAIN ROAD	MGLNX018.81	108104	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, selenium, zinc	None	(1) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Cadmium (dissolved), copper (dissolved), zinc (dissolved), lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved)

Priority	Monitoring Recommendations
Medium	Collect additional lead and dissolved metals (cadmium, copper, and zinc) due to exceedances. All core parameters need sample number and seasonal distribution coverage.

MCKELLIPS PARK LAKE 15060106B-0920 6.0 Acres

Category 2
Attaining some uses

FC - Attaining • PBC - Inconclusive • AGI - Attaining
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 2/14/2007 - 12/2/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT DRAIN	MG MPL-W	107122	SRP	SRP

Metal Samples	Nutrients & Related Samples	Other Samples
(19-20) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(20) Nitrate, nitrite, phosphorus	(2-20) Naphthalene, pH, total dissolved solids, styrene, , tetrachloroethane, tetrachloroethylene, toluene, trichlorobenzene, trichloroethane 111, trichloroethane 112, trichloroethylene, trihalomethanes, vinylchloride, xylene

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

MINERAL CREEK (MIN)

Devil's Canyon - Gila River
15050100-012B
19.6 Miles

Category 5
Impaired

Middle Gila

*Dissolved oxygen (2006/08),
selenium (2004), and copper (1992)*

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Hex chromium ^d	11 ug/L	9/14/2007	12 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Copper ^d	3.4 ug/L ^{acute} , 2.6 ug/L ^{chronic} @ 23 mg/L hardness	12/17/2007	21 ug/L	A&Ww remains impaired with 4 exceedances in 23 samples.
	26 ug/L ^{acute} @ 203 mg/L hardness 14.6 ug/L ^{chronic} @ 177 mg/L hardness	7/16/2008	43 ug/L (Max) 39 ug/L (Median)	
	15.3 ug/L ^{chronic} @ 187 mg/L hardness	9/9/2008	23 ug/L	
	29.2 ug/L ^{chronic} @ >400 mg/L hardness	10/7/2008	48 ug/L	
Dissolved oxygen	6.0 mg/L	9/9/2006	1.16 mg/L	A&Ww remains impaired with 16 exceedances in 22 samples.
		12/5/2006	2.3 mg/L	
		4/16/2007	4.34 mg/L	
		5/18/2007	2.2 mg/L	
		6/26/2007	3.56 mg/L	
		7/11/2007	4.94 mg/L	
		8/3/2007	4.2 mg/L	
		9/14/2007	5.1 mg/L	
		10/5/2007	5.12 mg/L	
		4/8/2008	5.21 mg/L	
		5/14/2008	4.13 mg/L	
		6/10/2008	2.8 mg/L	
		7/16/2008	3.79 mg/L	
Dissolved oxygen	6.0 mg/L	8/13/2008	3.96 mg/L	Continued.
		9/9/2008	3.68 mg/L	
		10/7/2008	3.01 mg/L	

Parameter	Applicable Standard	Date	Result	Designated use support comments
Hydrogen sulfide	2 ug/L	11/20/2007	606 ug/L	A&Ww is inconclusive, 1 exceedance, 1 sample
pH	6.5 SU	12/5/2006	5 SU	AGL, A&Ww, and FBC are attaining with 2 exceedances in 24 samples.
		12/17/2007	5.33 SU	
Selenium	2 ug/L	12/5/2006	5.1 ug/L	A&Ww remains impaired with 10 exceedances in 13 samples.
		5/18/2007	6.2 ug/L	
		6/26/2007	9.8 ug/L	
		7/11/2007	8.7 ug/L	
		8/3/2007	9.7 ug/L	
		9/14/2007	11 ug/L	
		10/5/2007	8.8 ug/L	
		11/20/2007	9.1 ug/L	
		11/11/2008	5 ug/L	
		12/10/2008	5.4 ug/L	
SSC	80 mg/L	7/16/2008	96.8 mg/L	A&Ww is attaining. Reported single sample exceedance was storm related.

Monitoring Summary

Sampling period: 9/9/2006 - 12/10/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
TUNNEL OUTLET	MGMIN003.69	103333	ASARC	Permit Monitoring
AT INDIAN GARDENS	MGMIN008.81	103331	ASARC	Permit Monitoring
CHANNLE OUTLET	MGMIN002.65	103334	ASARC	Permit Monitoring
AT HIGHWAY 177 BRIDGE NORTH OF KEL- VIN, AZ	MGMIN001.38	100472	ASARC	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(1-64) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(1-61) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-64) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Hex chromium (dissolved), hydrogen sulfide
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Beryllium (dissolved), cadmium (dissolved), chromium (dissolved), copper (dissolved), cyanide, lead (dissolved), nickel (dissolved), selenium, selenium (dissolved), silver (dissolved), thallium, thallium (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
High	Collect additional samples in support of TMDL development. Use lower detection limits for dissolved metals.

Impairment Discussion
Remains impaired for copper (1992), selenium (2004), and dissolved oxygen (2006/8).

MINERAL CREEK (MNR)

Headwaters - Cedar Canyon Creek
15070102-823
4.0 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/20/2006 - 2/10/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT MOUTH	MGMNR000.21	102520	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, chromium, copper, manganese, mercury	None	(1) Dissolved oxygen, pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

PAINTED ROCK RESERVOIR

15070101-1020A
100 Acres

Category 3
Inconclusive

Middle Gila

FBC - Inconclusive • A&Ww - Inconclusive
AGL - Inconclusive • AGI - Inconclusive • FC - Inconclusive

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT DAM FOREBAY	MGPRR-2	100053	USFWS	
MID LAKE	MGPRR-3	100054	USFWS	
UPPER RESERVOIR	MGPRR-4	100055	USFWS	

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect samples to determine designated use attainments..

Delisting of Previous Impairment
EPA overfile in 2002 due to pesticides in fish tissue (DDT, toxaphene, chlordane). ADEQ proposes delisting this water body based on recent fish tissue and water quality data.

PEACHVILLE WASH

Headwaters - Fortuna Wash
15050100-1846
2.1 Miles

Category 3
Inconclusive

PBC - Inconclusive • AGL - Inconclusive
A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	15 ug/L	1/28/2008	44 ug/L	PBC is inconclusive with 2 exceedances in 3 samples (binomial).
		2/22/2010	15.9 ug/L	

Monitoring Summary

Sampling period: 1/28/2008 - 7/29/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FORTUNA WASH AT JEEP CROSSING	MGPEW000.02	106232	ADEQ	TMDL
AT BEDROCK OUTCROP	MGPEW000.79	108342	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(1-2) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect lead samples due to exceedances. Collect core parameters to represent at least 3 seasons during an assessment period.

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 4/3/2007 - 10/7/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DOWNSTREAM OF PECK MINE	MGPEC000.38	105396	ADEQ	TMDL
UPSTREAM OF PECK MINE	MGPEC003.48	105397	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1-2) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

PINE CREEK
 Headwaters - Turkey Creek
 15070102-069
 6.3 Miles

Category 3
 Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/20/2006 - 2/25/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NORTH OF PINE FLAT ROAD	MGPIN003.49	102521	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

POLAND WALKER TUNNEL

Headwater - Big Bug Creek
15070102-334
0.4 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Cadmium ^d	4.3 ug/L ^{acute} , 0.43 ug/L ^{chronic} @ 220 mg/L hardness	3/9/2010	284 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Copper ^d	28.2 ug/L ^{acute} , 17.6 ug/L ^{chronic} @ 220 mg/L hardness	3/9/2010	50.7 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Lead	15 ug/L	3/9/2010	44.6 ug/L	PBC is inconclusive with 1 exceedance in 1 sample (binomial).
Zinc ^d	229 ug/L @ 220 mg/L hardness	3/9/2010	23000 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BIG BUG CREEK	MGPWT000.01	108124	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, copper, lead, manganese, zinc	None	(1) pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Cadmium (dissolved), copper (dissolved), zinc (dissolved), lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more lead and dissolved metals (cadmium, copper, and zinc) due to exceedances. All core parameters in need of sample and seasonal distribution coverage.

PBC - Inconclusive • AGL - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	200 µg/L	7/31/2006	230 µg/L	AGL is attaining with 1 exceedance in 10 samples (binomial).
Copper	500 µg/L (AGL) 1300 µg/L (PBC)	7/31/2006	1500 µg/L	AGL is attaining with 2 exceedances in 10 samples (binomial). PBC is attaining with 1 exceedance in 10 samples (binomial).
		8/16/2007	1300 µg/L	
Lead	100 µg/L (AGL) 15 µg/L (PBC)	7/31/2006	300 µg/L	AGL is inconclusive with 3 exceedances in 11 samples (binomial). PBC is inconclusive with 7 exceedances in 11 samples (binomial requires 20 samples for impairment).
		8/16/2007	280 µg/L	
		12/1/2007	41.8 µg/L	
		12/8/2007	63.2 µg/L	
		12/11/2007	17.8 µg/L	
		1/6/2008	37 µg/L	
		12/8/2009	166 µg/L	

Monitoring Summary

Sampling period: 7/31/2006 - 12/8/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
JUST ABOVE CONFLUENCE WITH QUEEN CREEK	MGPTC000.15	104438	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(10-11) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(3-11) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Lead

Priority	Monitoring Recommendations
Medium	Collect more lead samples to determine AGL and PBC attainment. Part of Queen Creek TMDL.



QUEEN CREEK

Headwaters - Superior Mining Div. Outfall
15050100-014A
8.8 Miles

Category 5
Impaired

Middle Gila

**Add Selenium to the 303(d) list.
Lead (2010) and copper (2002)**

PBC - Impaired • AGL - Impaired • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	200 ug/L (AGL) 280 ug/L (PBC)	7/31/2006	330 ug/L	AGL and PBC are attaining with 2 exceedances in 24 samples.
		5/16/2007	310 ug/L	
Chromium	1000 ug/L (AGL) 100 ug/L (PBC)	7/31/2006	140 ug/L	AGL is attaining with 1 exceedance in 21 sample. PBC is inconclusive with 4 exceedances in 21 sample.
		5/16/2007	152 ug/L	
		7/21/2007	120 ug/L	
		9/22/2007	1690 ug/L	
Copper	500 ug/L (AGL) 1300 ug/L (PBC)	7/31/2006	1500 ug/L	AGL and PBC are attaining with 4 and 2 exceedances respectively in 25 samples.
		5/16/2007	1160 ug/L	
		7/21/2007	841 ug/L	
		8/16/2007	2300 ug/L	
Copper ^d	8.7 ug/L ^{acute} , 6 ug/L ^{chronic} @ 63 mg/L hardness	3/24/2007	29 ug/L	A&Ww remains impaired with 16 chronic exceedances in 22 samples. Some values (7/21 & 1/6) were aggregated differently in this assessment than in the last due to values in different weeks being only 1-2 days apart.
	16.1 ug/L ^{acute} , 10.5 ug/L ^{chronic} @ 121 mg/L hardness	5/16/2007	63 ug/L	
	21.2 ug/L ^{acute} @ 162 mg/L hardness 29 ug/L ^{chronic} @ 400 mg/L hardness	7/21/2007	46 ug/L (Max) 37 ug/L (Median)	
	49.6 ug/L ^{acute} @ 400 mg/L hardness 15.6 ug/L ^{chronic} @ 192 mg/L hardness	8/6/2007	78 ug/L (Max) 31 ug/L (Median)	
	49.6 ug/L ^{acute} , 29.3 ug/L ^{chronic} @ 400 mg/L hardness	8/16/2007	57 ug/L (Max) 54 ug/L (Median)	
	49.6 ug/L ^{acute} , 29.3 ug/L ^{chronic} @ 400 mg/L hardness	9/22/2007	92 ug/L	
	9.1 ug/L ^{acute} , 6.3 ug/L ^{chronic} @ 66 mg/L hardness	12/1/2007	38 ug/L	

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	14.7 ug/L ^{acute} @ 110 mg/L hardness 10.5 ug/L ^{chronic} @ 120 mg/L hardness	12/4/2007	29 ug/L (Max) 25 ug/L (Median)	Continued.
	12.4 ug/L ^{acute} , 8.3 ug/L ^{chronic} @ 92 mg/L hardness	12/12/2007	20 ug/L	
	10.2 ug/L ^{acute} , 7.4 ug/L ^{chronic} @ 75 mg/L hardness	1/6/2008	20 ug/L	
	8.2 ug/L ^{acute} , 5.7 ug/L ^{chronic} @ 59 mg/L hardness	2/5/2008	103 ug/L	
	9.47 ug/L ^{acute} , 6.52 ug/L ^{chronic} @ 69 mg/L hardness	1/10/2008	24 ug/L	
	9.7 ug/L ^{chronic} @ 110 mg/L hardness	1/30/2008	12 ug/L	
	26.8 ug/L ^{chronic} @ 361 mg/L hardness	4/7/2008	34 ug/L	
	8.5 ug/L ^{chronic} @ 93.5 mg/L hardness	2/7/2010	8.9 ug/L	
Dissolved oxygen	6.0 mg/L	7/31/2006	5.31 mg/L	A&Ww is attaining with 1 exceedance in 13 samples (binomial).
Lead	100 ug/L (AGL) 15 ug/L (PBC)	7/31/2006	430 ug/L	AGL and PBC remain impaired with 7 and 11 exceedances respectively in 23 samples (binomial).
		8/7/2006	53 ug/L	
		5/16/2007	309 ug/L	
		7/21/2007	223 ug/L	
		7/23/2007	49.4 ug/L	
		8/6/2007	114 ug/L	
		8/16/2007	605 ug/L	
		9/22/2007	505 ug/L	
		12/1/2007	82 ug/L	
		12/7/2007	134 ug/L	
		1/6/2008	32 ug/L	
pH	9.0 SU	12/4/2007	9.2 SU	AGL, A&Ww, and PBC are attaining with 1 exceedance in 15 samples (binomial).
SSC	80 mg/L	07/31/2006	8570 mg/L	A&Ww is inconclusive with one median exceedance. Most reported single sample exceedances storm related. Did not appear in 2010 assessment due to change in designated use status.
		08/07/2006	1085.708 mg/L	
		11/28/2006	484.625 mg/L	
		02/14/2007	103.8 mg/L	
		03/24/2007	143 mg/L	
		05/16/2007	33300 mg/L	
		07/21/2007	60000 mg/L	
		07/23/2007	360.25 mg/L	
		08/07/2007	86 mg/L	
		08/16/2007	18033.333 mg/L	
		09/22/2007	19015 mg/L	

Parameter	Applicable Standard	Date	Result	Designated use support comments
SSC	80 mg/L	12/01/2007	1710 mg/L	Continued.
		12/08/2007	3455 mg/L	
		12/11/2007	111 mg/L	
		01/06/2008	2030 mg/L	
		01/07/2008	473.5 mg/L	
		01/15/2008	84 mg/L	
		01/27/2008	131 mg/L	
		01/30/2008	121 mg/L	
		02/05/2008	500 mg/L	
		03/04/2008	230 mg/L	
Selenium	2 ug/L	07/31/2006	8.1 ug/L	A&Ww is impaired. Selenium values excluded in 2010 assessment due to reliance on AZAC detection limit issue flag which was later shown to be incorrect in this case.
		11/28/2006	5.4 ug/L	
		02/14/2007	8.9 ug/L	
		03/24/2007	4.7 ug/L	

Monitoring Summary

Sampling period: 7/31/2006 - 2/7/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
MAGMA AVE & QUEEN CREEK	MGQEN038.73	103095	ADEQ	TMDL
BELOW OMYA MINE	MGQEN044.42	103092	RESCU	Ambient
AT HIGHWAY 60 CULVERTS	MGQEN041.74	103093	ADEQ	TMDL
BLW MINE DISCHARGE	MGQEN037.17	103316	ADEQ	TMDL
BELOW BHP NPDES PERMIT	MGQEN037.09	103096	ADEQ	TMDL
ABOVE CONFLUENCE WITH UNNAMED TRIBUTARY	MGQEN041.42	105658	ADEQ	TMDL
ABOVE OMYA PIT AT BEDROCK OUTCROP	MGQEN045.03	105980	ADEQ	TMDL
JUST BELOW HEADWATERS	MGQEN045.93	103091	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(64-76) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(30-64) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	SSC
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Antimony (dissolved), arsenic (dissolved), cadmium (dissolved), copper (dissolved), lead, selenium, zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Medium	TMDL sampling complete.

Impairment Discussion
Remains impaired for copper (2002) and lead (2010). Copper TMDL initiated in 2004. Add Selenium to the 303(d) list,



QUEEN CREEK

Potts Canyon - Whitlow Canyon
15050100-014C
8.0 Miles

Category 5
Impaired

Middle Gila

IMPAIRMENT STATUS

Copper (2010)

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	200 ug/L (AGL) 80 ug/L (FC) 30 ug/L (FBC)	7/31/2006	460 ug/L	AGL, FC, and FBC are inconclusive with 1, 2, and 4 exceedances respectively in 9 samples (binomial).
		8/16/2006	105 ug/L	
		7/24/2007	42 ug/L	
		12/8/2007	40 ug/L	
Chromium	100 ug/L	7/31/2006	160 ug/L	FBC is inconclusive with 1 exceedance in 9 samples.
Copper	500 ug/L (AGL) 1300 ug/L (FBC)	7/31/2006	3800 ug/L	AGL and FBC are inconclusive with 2 exceedances in 9 samples (binomial).
		8/16/2007	2900 ug/L	
Copper ^d	18.3 ug/L ^{acute} , 11.9 ug/L ^{chronic} @ 139 mg/L hardness	7/24/2007	44 ug/L	A&Ww remains impaired.
	29.3 ug/L ^{chronic} @ > 400 mg/L hardness	8/16/2007	30 ug/L	
	13.1 ug/L ^{acute} , 8.7 ug/L ^{chronic} @ 97 mg/L hardness	12/1/2007	15 ug/L	
	10.2 ug/L ^{acute} , 7.0 ug/L ^{chronic} @ 75 mg/L hardness	12/8/2007	22 ug/L	
	12.4 ug/L ^{acute} , 8.3 ug/L ^{chronic} @ 92 mg/L hardness	12/11/2007	17 ug/L	
Dissolved oxygen	6.0 mg/L	7/31/2006	5.19 mg/L	A&Ww is inconclusive with 1 exceedance in 5 sample (binomial).
Lead	100 ug/L (AGL) 15 ug/L (FBC)	7/31/2006	1200 ug/L	AGL and FBC are inconclusive with 3 and 6 exceedances respectively in 9 samples (binomial). Binomial requires a minimum of 20 samples for impairment.
		7/24/2007	130 ug/L	
		8/16/2007	860 ug/L	
		12/1/2007	65 ug/L	
		12/8/2007	130 ug/L	
		12/11/2007	84 ug/L	
		1/6/2008	34 ug/L	

Parameter	Applicable Standard	Date	Result	Designated use support comments
SSC	80 mg/L	7/31/2006	42900 mg/L	A&Ww is attaining with no median exceedances. All single sample exceedances occurred during storm events.
		7/24/2007	252.5 mg/L	
		8/16/2007	35600 mg/L	
		12/1/2007	1402.5 mg/L	
		12/8/2007	3100 mg/L	
		12/11/2007	3200 mg/L	
		1/6/2008	1710 mg/L	
		1/29/2008	230 mg/L	
		2/5/2008	307 mg/L	

Monitoring Summary

Sampling period: 7/31/2006 - 2/5/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
JUST ABOVE QUEENS STATION AT RAILROAD TRESTLE	MGQEN030.06	103098	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(9) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(2-9) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper, lead, chromium, dissolved oxygen, arsenic
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Antimony (dissolved), arsenic, arsenic (dissolved), copper (dissolved), lead, selenium, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more copper, lead, chromium, arsenic, and dissolved oxygen samples due to exceedances. Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
Remains impaired for dissolved copper (2010). This reach is included with Queen Creek Copper TMDL project.



QUEEN CREEK

Superior Mining WWTP - Potts Canyon
15050100-014B
5.9 Miles

Category 5
Impaired

Middle Gila

IMPAIRMENT STATUS

Copper (2002)

PBC - Inconclusive • A&Wedw - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	28.5 ug/L ^{acute} , 17.7 ug/L ^{chronic} @ hardness 222 mg/L	7/31/2006	32 ug/L	A&Wedw chronic remains impaired with 5 exceedances in the assessment period.
	24.8 ug/L ^{acute} , 15.6 ug/L ^{chronic} @ hardness 192 mg/L	3/24/2007	25 ug/L	
	37.2 ug/L ^{acute} , 22.6 ug/L ^{chronic} @ 295 mg/L hardness	7/24/2007	51 ug/L	
	13.4 ug/L ^{chronic} @ 160 mg/L hardness 12	12/14/2007	18 ug/L	
	11.5 ug/L ^{acute} , 7.8 ug/L ^{chronic} @ 85 mg/L hardness	1/28/2008	23 ug/L	
Lead	15 mg/L	7/31/2006	82 ug/L	PBC is inconclusive with 2 exceedances in 5 samples (binomial).
		1/28/2008	26 ug/L	

Monitoring Summary

Sampling period: 7/31/2006 - 1/28/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT THE HIGH TRAIL BRIDGE	MGQEN034.25	103544	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(1-5) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead, selenium, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect lead samples due to exceedances. Collect at least 3 <i>E. coli</i> samples to represent 3 seasons over the assessment period to complete core parameter coverage.

Impairment Discussion
Remains impaired for copper (2002). This reach is included with Queen Creek Copper TMDL project.

FC - Inconclusive • PBC - Inconclusive • A&Wedw - Inconclusive
AGL - Inconclusive • AGI - Inconclusive

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT 107TH AVENUE	MGSLR001.09	100374	ADEQ	Fixed Station Network
ABOVE GILA RIVER	MGSLR001.11	100645	ADEQ	Fixed Station Network
ABOVE GILA RIVER	MGSLR000.88	100646	ADEQ	Fixed Station Network
AT 91ST AVE. WWTP DISCHARGE USGS 09512407	MGSLR003.96	100768	ADEQ	Fixed Station Network
BELOW TRES RIOS DISCHARGE	MGSLR003.33	101265	ADEQ	Ambient, Fixed Station Network
AT 91ST AVE CENTER CHANNEL	MGSLR003.56	103738	ADEQ	Fixed Station Network
AT 51ST AVE. BRIDGE	MGSLR009.30	104060	ADEQ	Fixed Station Network

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect samples to determine designated use attainments..

Delisting of Previous Impairment
EPA overfile in 2002 due to pesticides in fish tissue (DDT metabolites, toxaphene, chlordane). ADEQ proposes delisting this reach based on recent fish tissue and water quality data.

PBC - Inconclusive • AGL - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	200 µg/L (AGL) 280 µg/L (PBC)	7/31/2006	350 µg/L	AGL and PBC are inconclusive with 1 exceedance in 7 samples (binomial).
Copper	500 µg/L (AGL) 1300 µg/L (PBC)	7/31/2006	1800 µg/L	AGL is inconclusive with 5 exceedances in 9 samples. PBC is inconclusive with 3 exceedances in 9 samples (binomial).
		8/16/2007	800 µg/L	
		12/8/2007	1700 µg/L	
		1/7/2008	1600 µg/L	
		1/22/2010	544 µg/L	
Copper ^d	38.3 µg/L @ 170 mg/L hardness	12/8/2007	62 µg/L	A&We is attaining. No exceedances in the last 3 years of monitoring.
Lead	100 µg/L (AGL) 15 µg/L (PBC)	7/31/2006	840 µg/L	AGL and PBC are inconclusive with 9 exceedances in 9 samples (binomial).
		8/16/2007	740 µg/L	
		12/1/2007	213.1 µg/L	
		12/8/2007	1000 µg/L	
		12/11/2007	110 µg/L	
		1/7/2008	690 µg/L	
		1/28/2008	203.25 µg/L	
		1/22/2010	525 µg/L	
		2/22/2010	303.5 µg/L	

Monitoring Summary

Sampling period: 7/31/2006 - 2/22/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT WINDMILL	MGSKW004.11	106233	ADEQ	TMDL
AT BOYCE THOMPSON ARBORETUM	MGSKW000.07	103545	ADEQ	TMDL
BELOW SILVER KING MINE AT FS ROAD	MGSKW004.60	106288	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(11-13) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(1-10) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Arsenic, copper, lead
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), copper, lead
Lab Detection Limits Not Low Enough	Lead

Priority	Monitoring Recommendations
Medium	Collect more arsenic, copper, and lead samples due to exceedances.

SYCAMORE CREEK (SYD)

Tank Canyon - Agua Fria River
15070102-024B
17.6 Miles

Category 3
Inconclusive

Middle Gila

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 8/14/2008 - 4/21/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE SYCAMORE RANGER STATION	MGSYD009.13	100704	ADEQ	Ambient
UPSTREAM OF DRY CREEK	MGSYD009.51	106863	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TELEGRAPH CANYON

Headwaters - Arnett Creek
15050100-1819
6.1 Miles

Category 3
Inconclusive

FBC - Inconclusive • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	15 ug/L	1/22/2010	45.2 ug/L	FBC is inconclusive with 1 exceedance in 3 samples (binomial).

Monitoring Summary

Sampling period: 12/8/2009 - 1/27/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CONFLUENCE WITH ARNETT CREEK	MGTEC000.62	107863	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(2-3) Copper, lead	None	(1) Dissolved oxygen, pH, total dissolved solids,

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period. Collect more lead due to the exceedance.

TEMPE TOWN LAKE

15060106B-1588
220 Acres

Category 3
Inconclusive

Middle Gila

FC - Inconclusive • FBC - Inconclusive • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
pH	9.0 SU	7/5/2006	9.4 SU	A&Ww and FBC are inconclusive with 9 exceedances in 14 samples (binomial). Note: On July 20, 2010 one of the lower dams failed, completely draining the lake. The dam was replaced in September 2010 and the lake was refilled by the end of October.
		7/17/2006	9.3 SU	
		7/31/2006	9.3 SU	
		8/8/2006	9.3 SU	
		8/21/2006	9.3 SU	
		9/5/2006	9.5 SU	
		9/11/2006	9.5 SU	
		9/18/2006	9.5 SU	
		9/25/2006	9.3 SU	

Monitoring Summary

Sampling period: 7/5/2006 - 12/5/2006

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
MID LAKE SITE	MGTTT-MID	102452	AGF	Ambient
USD	MGTTT-B	101315	ADEQ	CLP
DSD	MGTTT-A	101316	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, manganese, mercury, nickel, selenium, silver, thallium, zinc	None	(3-38) <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), mercury
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect core parameters to represent at least 3 seasons during an assessment period.

TRIBUT TO BIG BUG CREEK

Headwater - Big Bug Creek
15070102-134
0.8 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	4.1 ug/L @ hardness = 16 mg/L	3/9/2010 1	20.2 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.
Lead	15 ug/L	3/9/2010 1	174 ug/L	PBC is inconclusive with 1 exceedance in 1 sample (binomial).
Lead ^d	17.7 ug/L @ hardness = 16 mg/L	3/9/2010 1	156 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.
Zinc ^d	235 ug/L @ hardness = 16 mg/L	3/9/2010 1	300 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT POLAND JUCTION (FOREST TRAIL 261)	MGUBB000.11	108122	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, selenium, zinc	None	(1) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved), lead (dissolved), zinc (dissolved), lead
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved), zinc (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more lead and dissolved metals (copper, lead, and zinc) due to exceedances and obtain analyses with lower detection limits. All core parameters need sample number and seasonal distribution coverage.

TRIBUT TO BIG BUG CREEK (UB1)

Headwater - Big Bug Creek
15070102-234
1.34 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	3.4 ug/L ^{acute} , 2.6 ug/L ^{chronic} @ 23 mg/L hardness	3/9/2010	10.5 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Lead ^d	0.49 ug/L @ 23 mg/L hardness	3/9/2010	2.6 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.
Zinc ^d	33.7 ug/L @ 23 mg/L hardness	3/9/2010	130 ug/L	A&Wc is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 3/9/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW SNOWDRIFT MINE AT CONFLUENCE	MGUB1000.01	108123	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, selenium, zinc	None	(1) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Cadmium (dissolved), copper (dissolved), zinc (dissolved), lead (dissolved)
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved), zinc (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more dissolved metals (copper, lead, and zinc) due to exceedances and try to obtain analyses with lower detection limits. All core parameters in need of sample and seasonal distribution coverage.

TRIBUT TO CASH MINE CREEK

Headwaters - Cash Mine Creek
15070103-415
1.0 Miles

Category 4A
Not Attaining

Middle Gila

Cadmium, copper, and zinc (2002)

FC - Inconclusive • FBC - Inconclusive
A&Wc - Not Attaining

Monitoring Summary

Sampling period: No current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
UPSTREAM OF REMEDIATED MCCLEUR TAILINGS	MGMMT000.13	102816	ADEQ	TMDL
DOWNSTREAM OF REMEDIATED MCCLEUR TAILINGS	MGMMT000.01	102817	ADEQ	TMDL
AT BASE OF MCCLEUR TAILINGS	MGUCM000.09	103352	ADEQ	TMDL
UPSTREAM OF ADIT AND MCCLEUR TAILINGS	MGUCM000.27	103357	ADEQ	TMDL
AT ADIT UPSTREAM OF MCCLEUR TAILINGS	MGUCM000.25	103358	ADEQ	TMDL
DOWNSTREAM OF ADIT UPSTREAM OF MCCLEUR	MGUCM000.22	103359	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
None	None	None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All designated uses
Missing Seasonal Distribution	All designated uses
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Conduct effectiveness monitoring after TMDL strategies have been implemented.

Impairment Discussion
Included in the Hassayampa River TMDL (2002).

TRIBUTORY TO DRY MINERAL CREEK

Headwaters - Dry Mineral Creek
15050100-212
1.4 Miles

Category 3
Inconclusive

Middle Gila

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper	1300 ug/L	3/14/2008	340000 ug/L	PBC is inconclusive with 1 exceedance in 1 sample (binomial).
Copper ^d	85.9 ug/L @ > 400 mg/L hardness	3/14/2008	310000 ug/L	A&We is attaining. 1 exceedance outside the assessment window.
pH	6.5 SU	3/14/2008	2.71 SU	A&We and PBC are inconclusive with 1 exceedance in 1 sample (binomial).

Monitoring Summary

Sampling period: 3/14/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE 500 FT. ADIT	MGUDR001.20	106784	ADEQ	TMDL
AT 500 FT. ADIT	MGUDR001.15	106783	ADEQ	TMDL
BELOW UPPER PASQUATE DUMPS	MGUDR001.41	106785	ADEQ	TMDL
NEAR LOWER PASQUATE ADIT	MGUDR000.99	106782	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	None	(4) pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH, copper (dissolved), copper
Missing Core Parameters	Dissolved oxygen,
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect more pH and copper samples due to exceedances.

TRIB (UQ2) TO QUEEN CREEK

Headwaters - Queen Creek
15050100-1000
0.5 Miles

Category 5
Impaired

Middle Gila

IMPAIRMENT Copper (2010) STATUS

PBC - Inconclusive • AGL - Inconclusive • A&We - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	14.6 ug/L @ 61 mg/L hardness	8/17/2007	40 ug/L	A&We remains impaired. No new data since last assessment.
	9.6 ug/L @ 39 mg/L hardness	12/8/2007	52 ug/L	
	7.3 ug/L @ 29 mg/L hardness	1/6/2008	36 ug/L	
Lead	15 ug/L	12/8/2007	24.8 ug/L	PBC is inconclusive with 1 exceedance in 3 samples (binomial).

Monitoring Summary

Sampling period: 8/17/2007 - 1/6/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DRAINAGE ON NORTH FACE OF QUEEN CREEK CANYON	MGUQ2000.07	105760	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(1-3) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	Dissolved oxygen
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), copper, lead
Lab Detection Limits Not Low Enough	Copper (dissolved)

Priority	Monitoring Recommendations
Medium	Collect lead samples due to the exceedance.

Impairment Discussion
Remains impaired for copper (2010). Included as part of Queen Creek TMDL.

TRIB (UQ3) TO QUEEN CREEK

Headwaters (Near King's Crown Peak) - Queen Creek
15050100-1843
1.7 Miles

Category 5
Impaired

Middle Gila

IMPAIRMENT Copper (2010) STATUS

PBC - Inconclusive • AGL - Inconclusive • A&We - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	16.4 ug/L @ 69 mg/L hardness	8/7/2007	23 ug/L	A&We remains impaired with 4 exceedances in 5 samples.
	12.8 ug/L @ 53 mg/L hardness	12/1/2007	25 ug/L	
	16.2 ug/L @ 68 mg/L hardness	12/3/2007	19 ug/L	
	8.4 ug/L @ 34 mg/L hardness	1/6/2008	14 ug/L	

Monitoring Summary

Sampling period: 8/7/2007 - 1/6/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
660 METERS EAST OF HIGHWAY 60 TUNNEL	MGUQ3000.03	105761	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(1-5) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Dissolved oxygen
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), copper, lead
Lab Detection Limits Not Low Enough	Copper (dissolved)

Priority	Monitoring Recommendations
Medium	Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
Remains impaired for copper (2010). Included as part of Queen Creek TMDL.

TRIB (UQE) TO QUEEN CREEK

Headwaters - Queen Creek
15050100-991
2.0 Miles

Category 5
Impaired

Middle Gila

IMPAIRMENT

Copper (2010)

PBC - Attaining • AGL - Attaining • A&We - Impaired

STATUS

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	7.7 ug/L @ 31 mg/L hardness	2/2/2007	34 ug/L	A&We remains impaired with 16 exceedances in 16 samples.
	6.1 ug/L @ 24 mg/L hardness	3/23/2007	37 ug/L	
	5.8 ug/L @ 23 mg/L hardness	3/27/2007	35.4 ug/L	
	9.3 ug/L @ 38 mg/L hardness	7/23/2007	55 ug/L	
	7.5 ug/L @ 30 mg/L hardness	8/6/2007	63 ug/L	
	9.8 ug/L @ 40 mg/L hardness	8/16/2007	65 ug/L	
	6.1 ug/L @ 24 mg/L hardness	12/1/2007	53 ug/L	
	5.1 ug/L @ 20 mg/L hardness	12/8/2007	49 ug/L	
	6.1 ug/L @ 24 mg/L hardness	12/12/2007	47 ug/L	
	4.1 ug/L @ 16 mg/L hardness	1/6/2008	23 ug/L	
	6.3 ug/L @ 25 mg/L hardness	1/11/2008	51 ug/L	
	6.5 ug/L @ 26 mg/L hardness	1/15/2008	33 ug/L	
	7 ug/L @ 28 mg/L hardness	1/27/2008	21 ug/L	
	5.8 ug/L @ 23 mg/L hardness	1/30/2008	39 ug/L	
	2.3 ug/L @ 8.5 mg/L hardness	2/5/2008	41 ug/L	
	7.0 ug/L @ 28 mg/L hardness	3/4/2008	27 ug/L	
Lead	15 ug/L	8/16/2007	17.7 ug/L	PBC is attaining with 1 exceedance in 16 samples (binomial).
pH	6.5 SU	8/16/2007	5.53 SU	AGL, A&We, and PBC are attaining with 2 exceedances in 14 samples (binomial).
		12/11/2007	6.16 SU	

Monitoring Summary

Sampling period: 7/31/2006 - 3/4/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DRAINING OAK FLAT	MGUQE000.01	104522	ADEQ	TMDL
AT HAIRPIN TURN OF TRIB TO OAK FLAT	MGUQE001.08	106224	ADEQ	TMDL
ABOVE AUTO SAMPLER AT HIGH FLOW SITE	MGUQE000.38	106019	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(22) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	None	(6-20) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead, zinc (dissolved), assessment unit

Priority	Monitoring Recommendations
Medium	Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
Remains impaired for copper (2010). Included in Queen Creek TMDL project.

TURKEY CREEK

Headwaters - Tributary at 341928/1122128
15070102-036A
9.1 Miles

Category 3
Inconclusive

Middle Gila

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/20/2006 - 2/25/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DS FROM MOUTH OF AR- RASTRA CREEK	MGTRK021.89	107782	ADEQ	TMDL
UPSTREAM OF 5,000 MSL	MGTRK021.44	102512	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dis- solved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dis- solved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dis- solved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assess- ment period.

TURKEY CREEK

Tributary at 341928 / 1122128 - Poland Creek
15070102-036B
21 Miles

Category 4A
Not Attaining

Copper and lead (1992)

FC - Inconclusive • FBC - Not Attaining • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Not Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	15 ug/L	12/1/2007	19 ug/L	FBC remains not attaining with 2 exceedances in 6 samples (binomial).
		1/6/2008	25 ug/L	
pH	9.0 SU	12/1/2007	9.9 SU	AGI, AGL, A&Ww, and FBC are inconclusive with 1 exceedance in 7 samples (binomial).
SSC	80 mg/L	12/1/2007	3550 mg/L	A&Ww is attaining. This exceedance occurred during a storm event and was excluded from assessment.

Monitoring Summary

Sampling period: 7/20/2006 - 3/2/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DOWNSTREAM OF TRIBUTARY AND OF MINES	MGTRK004.33	102518	ADEQ	TMDL
ON CROWN KING ROAD AT BRIDGE	MGTRK004.42	101627	ADEQ	TMDL
UPSTREAM OF CONFLUENCE WITH POLAND CREEK	MGTRK000.10	104500	ADEQ	TMDL
BELOW GOLDEN TURKEY MINE UPSTREAM OF SPRING	MGTRK003.89	102510	ADEQ	TMDL
NORTH OF CLEATOR AT FOREST ROAD 93 CROSSING	MGTRK007.28	101083	ADEQ	TMDL

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH
Missing Core Parameters	Cadmium (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	Copper (dissolved), lead (dissolved)

Priority	Monitoring Recommendations
Medium	Collect pH samples due to the exceedance. Collect lead and copper samples to determine the effectiveness of TMDL implementation strategies once they have been implemented.

Impairment Discussion
Copper and lead TMDL completed in 2004.

TUSCUMBIA CREEK

Headwaters - Bear Creek
15070102-850
4.1 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 2/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE MOUTH	MGTUS000.06	107704	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Arsenic, boron, copper, lead, manganese	None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

PBC - Inconclusive • AGL - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Lead	100 ug/L (AGL) 15 ug/L (PBC)	12/8/2009	126 ug/L	AGL is inconclusive with 1 exceedance in 4 samples. PBC is inconclusive with 3 exceedances in 4 samples (binomial).
		9/3/2009	35 ug/L	
		1/22/2010	25.3 ug/L	

Monitoring Summary

Sampling period: 9/3/2009 - 1/27/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW CONFLUENCE WITH WOOD CAMP CANYON AND REEVIS TRAIL	MGWFC003.58	107442	ADEQ	TMDL
BELOW BARNETT CAMP	MGWHC000.34	107682	ADEQ	TMDL
AT FOREST SERVICE ROAD 650	MGWHC002.01	107922	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4-8) Copper, lead	None	(2-5) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Lead
Missing Core Parameters	Zinc (dissolved), cadmium (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), copper, lead
Lab Detection Limits Not Low Enough	Lead

Priority	Monitoring Recommendations
Low	Collect more lead samples due to exceedances. Collect core parameters to represent at least 3 seasons during an assessment period.

Salt Watershed

Watershed Description

This watershed is composed of the Salt River drainage from its headwaters to Granite Reef Dam, excluding the Verde River drainage. This watershed can be divided into four very distinct sub-basins: White River, Black River, Tonto Creek, and the main stem Salt River.

The population of this 6,242 square mile watershed is approximately 40,500 people (2000 census), with most of this population in the Superior-Globe-Miami mining district. Land ownership is approximately: 49% Tribal, 48% federal, 2% private, and 1% state. The principal land uses are open range grazing, recreation, forestry, and mining. Nine wilderness areas have been set aside, which have restricted land uses and activities.

Elevations range from 10,600 feet (above sea level) in the White Mountains, to about 2,000 feet at Granite Reef Dam. The watershed above Roosevelt Lake (White River, Black River, and Tonto Creek) is above 5,000 feet elevation with high desert flora and fauna, and coldwater aquatic communities where perennial waters exist. The area below Roosevelt Lake is below 5,000 feet, and therefore, contains primarily warmwater aquatic communities.

Water Resources

This Watershed receives more precipitation than most of the state, with approximately 20 inches of rain and 20 inches of snowfall. Roosevelt Lake and a chain of other reservoirs (Apache, Canyon, and Saguaro) were constructed to store perennial flow from this watershed and provide much of the water used in the Phoenix metropolitan area.

An estimate of surface water resources in the Salt Watershed is provided in the following table. Waters on Tribal lands are not assessed by ADEQ; therefore, those statistics are shown separately.

Estimated Surface Water Resources in the Salt Watershed

	Perennial	Intermittent	Ephemeral
Stream miles	510	1,190	2,785
	Perennial	Non-perennial	
Lake acres	25,544	0	

Additional Surface Water Resources Locate on Tribal Lands – Not Assessed

	Perennial	Intermittent	Ephemeral
Stream miles On Tribal Lands	825	0	4,275
	Perennial	Non-perennial	
Lake acres On Tribal Lands	1,858	0	

Ambient monitoring focuses on perennial waters; however, special investigations may identify water quality problems on intermittent and even ephemeral waters. Estimated miles and acres are based on USGS digitized hydrology at 1:100,000 and have been rounded to the nearest 5 miles or 5 acres.

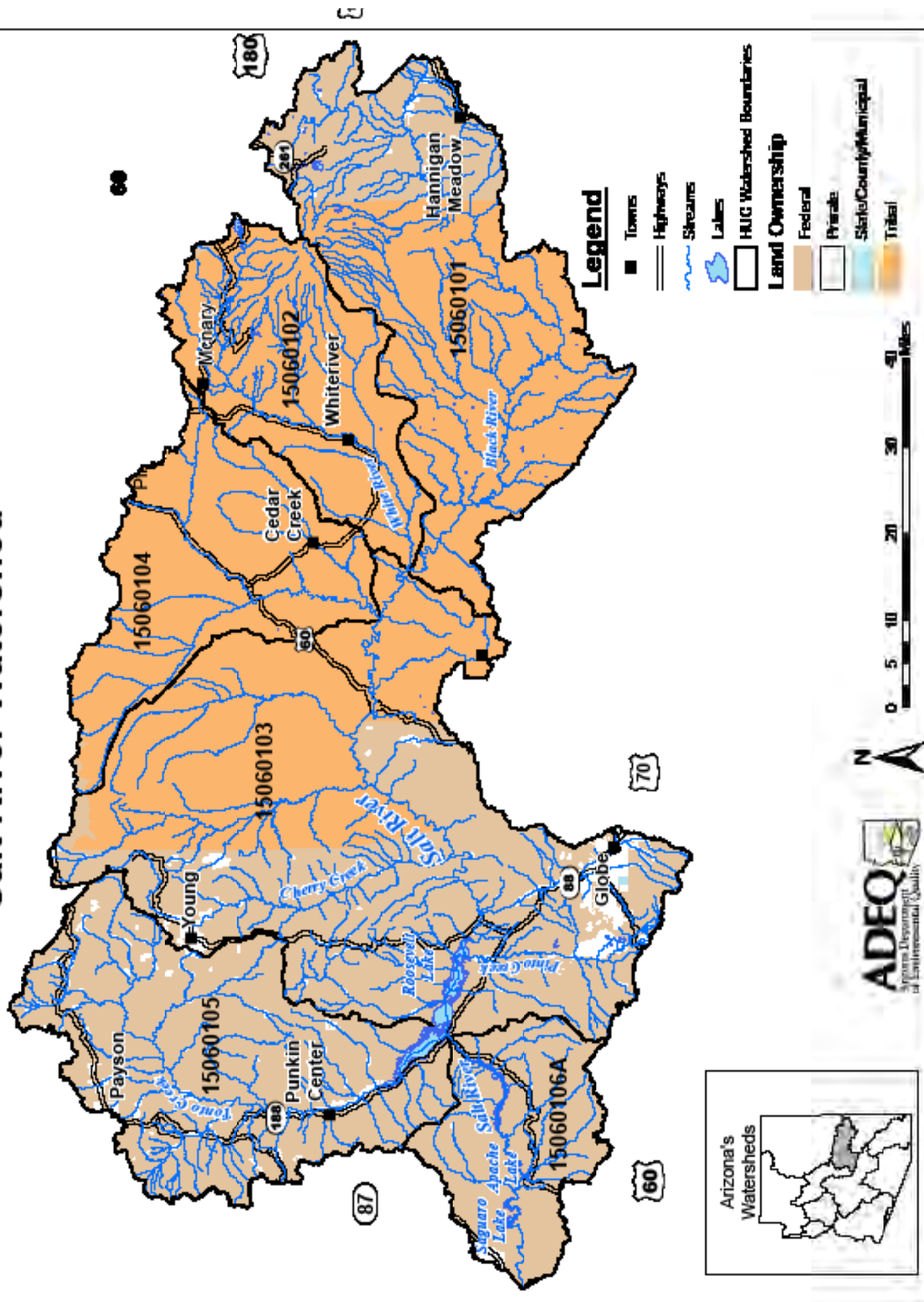
Assessments

The Salt Watershed can be separated into the following drainage areas (subwatersheds):

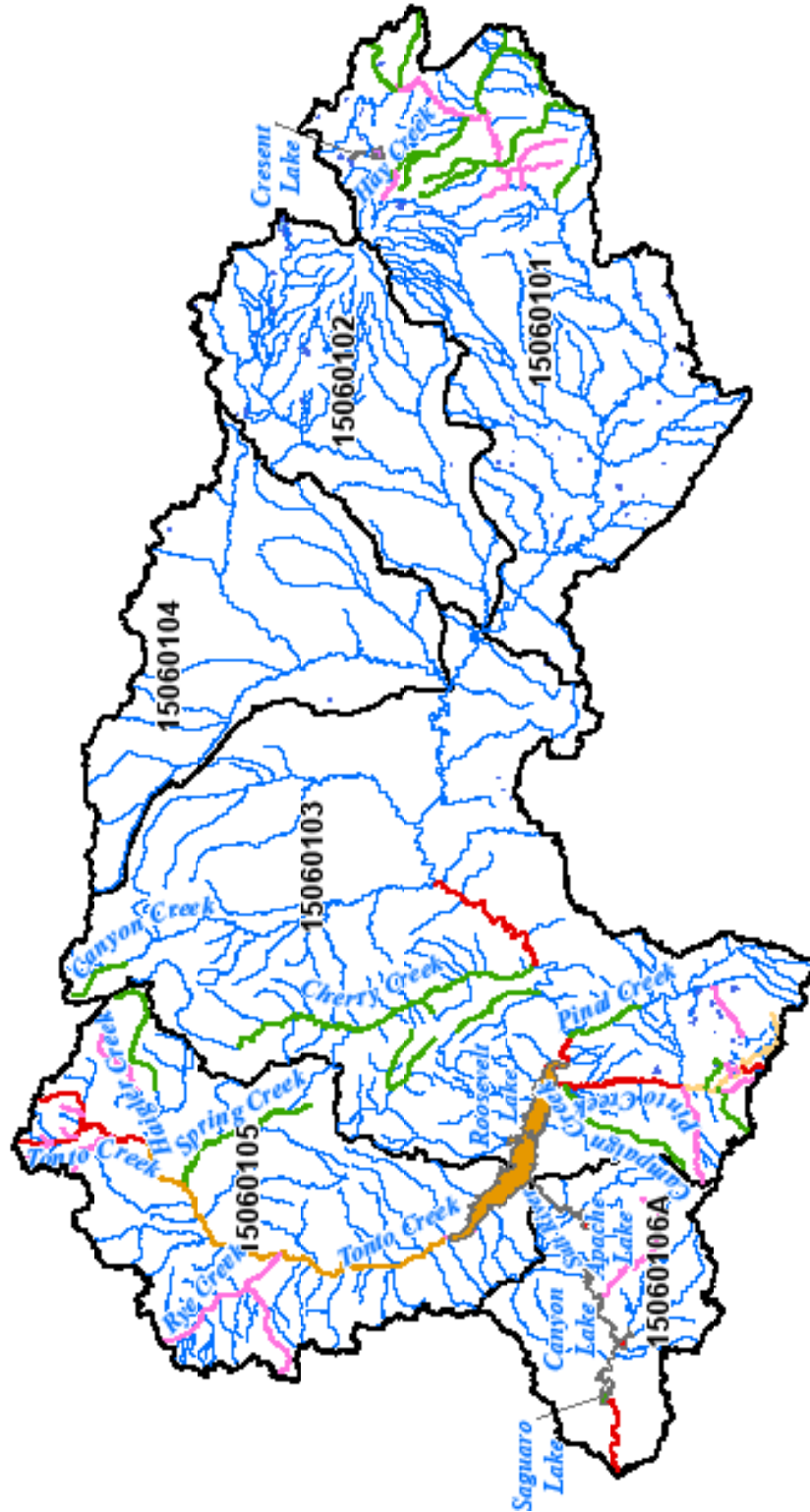
15060101	Black River
15060102	White River (Tribal land – Not assessed)
15060103	Upper Salt River
15060104	Carrizo Creek (Tribal land – Not assessed)
15060105	Tonto Creek
15060106A	Lower Salt River

These drainage areas and the surface waters assessed as “attaining” or “impaired” are illustrated on the following watershed map. Methods used to complete these assessments are described in the “Surface Water Assessment Methods and Technical Support” document.

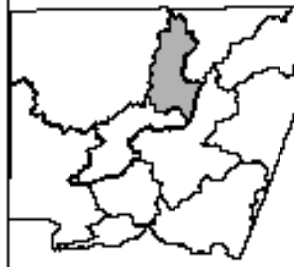
Salt River Watershed



Salt Watershed 2012/2014 Assessment for Streams and Lakes



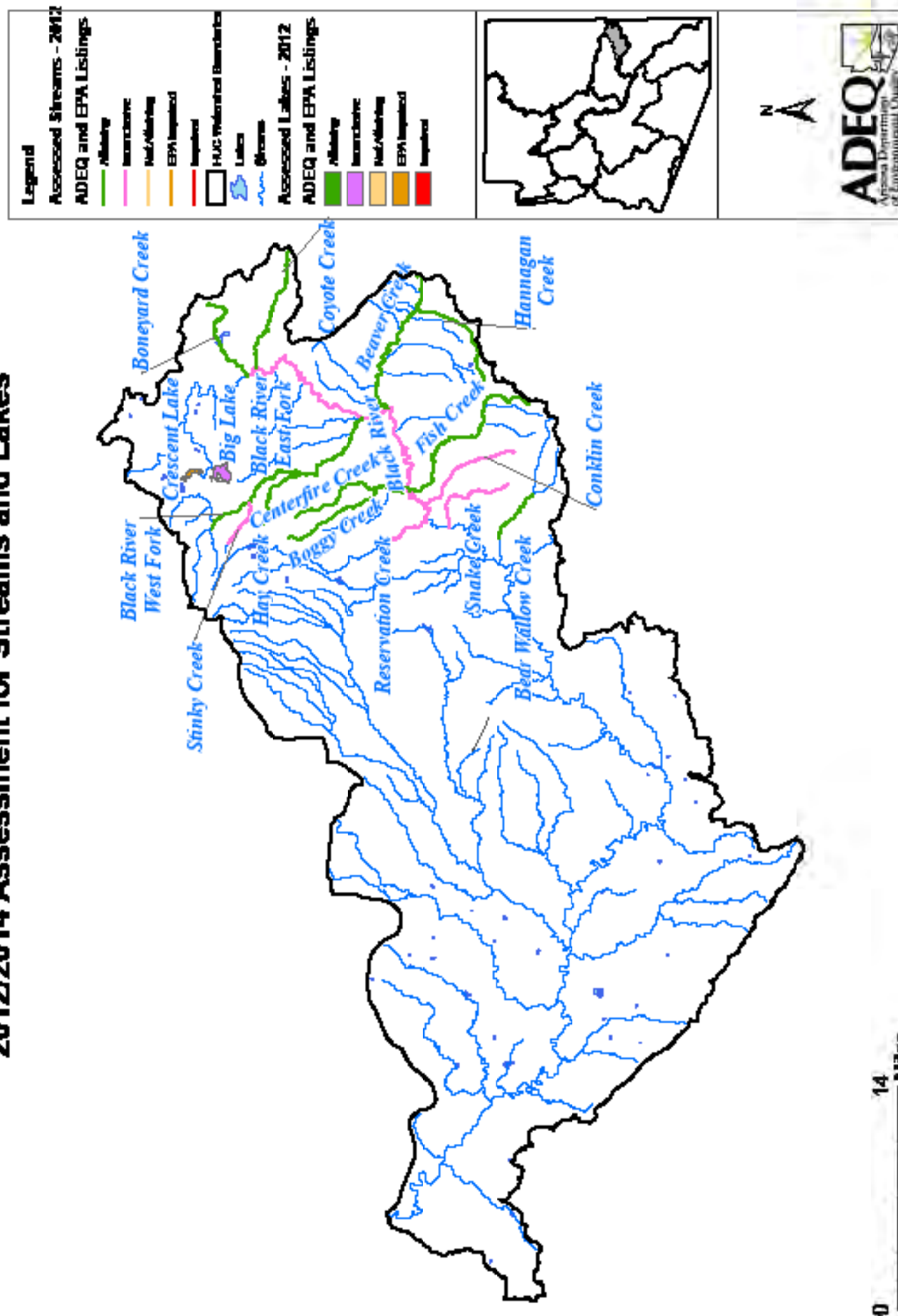
- Legend**
- Assessed Lakes - 2012
 - ADEQ and EPA Listings
 - Attaining
 - Intermediate
 - Not Attaining
 - EPA Impaired
 - Impaired
 - HUC Watershed Boundaries
 - Assessed Streams - 2012
 - ADEQ and EPA Listings
 - Attaining
 - Intermediate
 - Not Attaining
 - EPA Impaired
 - Impaired
 - Lakes
 - Streams



See Individual HUC Printouts
for Waters not Labeled



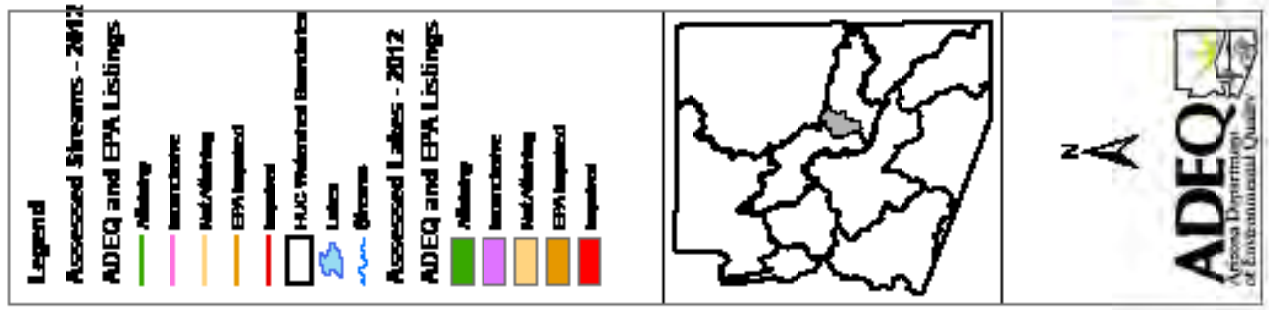
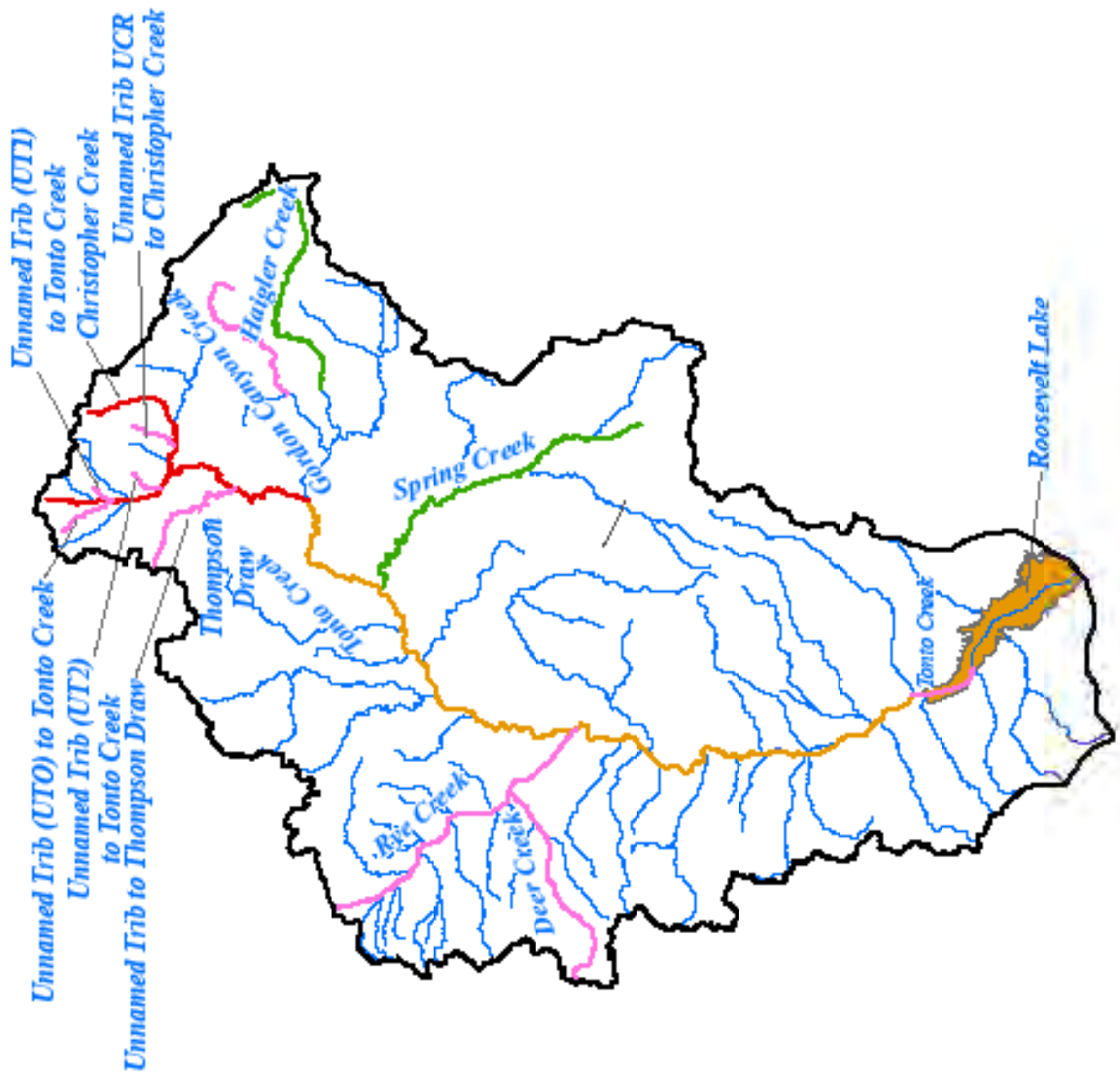
Salt Watershed **HUC 15060101** **2012/2014 Assessment for Streams and Lakes**



Salt



Salt Watershed **HUC 15060105** **2012/2014 Assessment for Streams and Lakes**



Low dissolved oxygen (2006/8)

DWS - Inconclusive • FC - Attaining • FBC - Inconclusive
 AGI - Inconclusive • AGL - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	10 ug/L	9/23/2008	12 ug/L	DWS is inconclusive with 1 exceedance in 7 samples (binomial).
Beryllium	4 ug/L	2/19/2009	64 ug/L	DWS is inconclusive with 1 exceedance in 7 samples (binomial).
Cadmium ^d	3.5 ug/L ^{chronic} @ 185 mg/L hardness	1/23/2008	6.1 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Copper ^d	20.7 ug/L ^{acute} , 13.2 ug/L ^{chronic} @ 158 mg/L hardness	5/6/2009	30 ug/L	A&Ww is inconclusive with 1 exceedance.
Dissolved oxygen	6.0 mg/L	7/22/2008	3.42 mg/L	A&Ww is remains impaired with 3 exceedances in 12 samples (binomial).
		12/12/2007	5.69 mg/L	
		2/19/2009	2.36 mg/L	
Lead ^d	4.0 ug/L @ 154 mg/L hardness	7/22/2008	6 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Nitrogen	1.0 mg/L, SSM 0.3 mg/L, Annual Mean	1/23/2008	4.7 mg/L	A&Ww & FBC are inconclusive with 3 exceedances in 15 samples (binomial). No annual average exceedances (2nd aggregation function and time frame for calculating average changed from 2010).
		5/8/2008	1.04 mg/L	
		7/22/2008	1.06 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual Mean	11/2/2006	0.08 mg/L	A&Ww and FBC are inconclusive with 5 exceedances in 19 samples (2nd aggregation function changed since last assessment). 2 numeric annual mean exceedances but none were composites at 1,2, & 5 meters as required.
		2/14/2008	0.062 mg/L	
		7/22/2008	0.11 mg/L	
		9/23/2008	0.09 mg/L	
		5/6/2009	0.16 mg/L	
		7/07-6/08	0.038 mg/L	
		7/08-6/09	0.031 mg/L	
Manganese	10000 ug/L AGI 980 ug/L DWS	7/22/2008	20000 ug/L	AGI and DWS are inconclusive with 1 exceedance in 7 samples (binomial).
pH	9.0 SU	7/22/2008	9.5 SU	AGI, AGL, A&Ww, DWS, and FBC are inconclusive with 1 exceedance in 8 samples (binomial).

Monitoring Summary

Sampling period: 11/2/2006 - 5/6/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Marina	SRAPA-MAR	100998	ADEQ	CLP
At Dam	SRAPA-A	100997	ADEQ	CLP
At Riverine Zone	SRAPA-C	101706	UA	CLP
Open Water Northwest From Resort	SRAPA-NLS	105780	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(18-21) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-23) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(18-22) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Manganese, pH, copper (dissolved), lead (dissolved), arsenic, beryllium, cadmium (dissolved), dissolved oxygen, nitrogen, phosphorus
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect manganese, arsenic, beryllium, dissolved copper, dissolved lead, and pH samples due to exceedances. Collect <i>E. coli</i> to reflect 3 seasons over assessment period to complete core parameter coverage.

Impairment Discussion
Remains impaired for low dissolved oxygen.

BEAR WALLOW CREEK

N. and S. Forks Bear Wallow - Indian Res.
15060101-023A
5.9 Miles

Category 1
Attaining all uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 8/1/2007 - 5/4/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW SOUTH FORK BEAR WALLOW CREEK	SRBWL005.79	101198	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(5) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), selenium, mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower lab reporting limits for dissolved metals, especially cadmium and copper. Good core parameter coverage with small number of samples.

BEAVER CREEK

Headwaters - Black River
15060101-008
13.121 Miles

Category 2
Attaining some uses

Salt

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/18/2008	6.5 mg/L	A&Wc is inconclusive with 1 exceedance in 7 samples.
SSC	25 mg/L	7/31/2007	49 mg/L	A&Wc is attaining with no median exceedances.

Monitoring Summary

Sampling period: 7/31/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD 26 BRIDGE	SRBEV007.28	102135	ADEQ	Ambient
AT USGS GAGE NEAR SPRUCEDALE, AZ	SRBEV001.40	100373	ADEQ	Ambient
BELOW HANNAGAN CREEK	SRBEV009.56	102139	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(11) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(9-11) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(8-12) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	None
Missing Seasonal Distribution	Copper (dissolved)
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), zinc (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen samples due to the exceedance.

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 10/29/2010 - 5/11/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Dam	SRBIG-A	101322	ADEQ	CLP, TMDL
Mid Lake	SRBIG-B	101355	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(3-4) Arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, arsenic, chromium, lead, boron, manganese, copper, fluoride
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER

Beaver Creek - Reservation Creek
15060101-007
13.1 Miles

Category 3
Inconclusive

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/10/2008 - 7/10/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD #25	SRBLR102.24	101202	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER EAST FORK

Headwaters - Black River
15060101-009
26.7 Miles

Category 3
Inconclusive

Salt

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 8/31/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE DIAMOND ROCK CAMPGROUND	SREFB008.27	100539	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER WEST FORK

Indian Reservation Boundary - Black River
15060101-048
14.6 Miles

Category 2
Attaining some uses

DWS - Attaining • FC - Attaining • FBC - Attaining
AGI - Attaining • AGL - Attaining • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK CAMPGROUND	SRWFB005.34	100691	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Copper (dissolved)
Missing Seasonal Distribution	Copper (dissolved)
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc. Collect dissolved copper samples to reflect 3 seasons over assessment period to complete core parameter coverage.

BLOODY TANKS WASH

Schultze Ranch - Miami Wash
15060103-034B
6.645 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	14.8 ug/L ^{acute} @ 62 mg/L hardness	2/5/2008	46 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 2/5/2008 - 2/5/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT FOREST AVENUE	SRBTW003.16	105999	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(0) None	(1) pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Not enough data to assess. Collect more dissolved copper samples due to the exceedance. All core parameters in need of sample number and seasonal distribution coverage.

BOGGY CREEK (BGY)

Headwaters - Centerfire Creek
15060101-361
7.1 Miles

Category 1

Attaining all uses

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 7/27/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FOREST SERVICE ROAD 25	SRBGY002.86	108402	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

BONEYARD CREEK

Headwaters - East Fork Black
15060101-305
7.6 Miles

Category 1
Attaining all uses

Salt

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 8/1/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CLABBER CITY	SRBON001.69	102125	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium and copper. Good core parameter coverage with small number of samples.

CAMPAIGN CREEK

Headwaters - Pinto Creek
15060103-037
16.579 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/29/2007	5.04 mg/L	A&Ww is inconclusive with 1 exceedance in 4 samples.
SSC	80 mg/L	8/29/2007	248 mg/L	A&Ww is attaining with no median exceedances.

Monitoring Summary

Sampling period: 8/29/2007 - 11/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT SUPERSTITION WIL- DERNESS BOUNDARY	SRCGN009.78	100431	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen samples due to the exceedance. Collect <i>E. coli</i> to represent at least 3 seasons during an assessment period.

DWS - Attaining • FC - Attaining • FBC - Attaining
AGI - Attaining • AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 5/10/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE VALENTINE CANYON	SRCYN045.73	100528	ADEQ	Ambient
BELOW FISH HATCHERY	SRCYN048.21	108442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-8) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(7) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-8) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium, zinc (dissolved)

Priority	Monitoring Recommendations
Low	Use lower lab reporting limits for dissolved metals, especially cadmium, copper, and zinc. Good core parameter coverage with few samples.

Low dissolved oxygen (2004)

DWS - Inconclusive • FC - Attaining • FBC - Inconclusive
 AGI - Attaining • AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	9/27/2006	0.69 mg/L	A&Ww remain impaired with 4 exceedances in 15 samples (binomial).
		10/25/2006	2.58 mg/L	
		7/11/2007	5.5 mg/L	
		6/26/2008	4.5 mg/L	
Manganese	980 µg/L	9/30/2008	10000 µg/L	DWS is inconclusive with 1 exceedance in 8 samples (binomial).
pH	9.0 SU	6/26/2008	9.7 SU	AGI, AGL, A&Ww, DWS, and FBC are attaining with 2 exceedances in 16 samples (binomial).
		7/30/2008	9.5 SU	
Nitrogen	1.0 mg/L, SSM 0.3 mg/L, Annual mean	2/25/2008	3.4 mg/L	A&Ww & FBC are inconclusive with 4 exceedances in 16 samples (SSM, binomial) and 1 numeric annual mean exceedance.
		3/20/2008	4.0 mg/L	
		4/14/2008	2.2 mg/L	
		7/30/2008	1.03 mg/L	
		07/06-06/0	0.48 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual mean	9/27/2006	0.09 mg/L	A&Ww & FBC are inconclusive with 8 exceedances in 15 samples (SSM, binomial) and 3 numeric annual mean exceedances (they were not composites at 1,2, & 5 meters as required).
		10/25/2006	0.068 mg/L	
		7/11/2007	0.3 mg/L	
		2/25/2008	0.134 mg/L	
		3/20/2008	0.11 mg/L	
		4/15/2008	0.08 mg/L	
		9/30/2008	0.061 mg/L	
		5/11/2009	0.51 mg/L	
		7/06-6/07	0.06 mg/L	
		7/07-6/08	0.05 mg/L	
		7/08-6/09	0.04 mg/L	

Monitoring Summary

Sampling period: 9/27/2006 - 5/11/2009

Salt

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT INLET	SRCAN-C1	102615	UA	CLP
IN TRANSITIONAL ZONE	SRCAN-B	101699	ADEQ	CLP
AT MARINA	SRCAN-MAR	101701	UA	CLP
AT STEEP CLIFFS	SRCAN-STE	105719	ADEQ	CLP
ACROSS FROM RESTAURANT LOUNGE	SRCAN-RL	105720	ADEQ	Ambient
DAM SITE IN LITTORAL ZONE	SRCAN-A	101697	ADEQ	CLP
UPPER MIDDLE	SRCAN-MID	102837	AGFD	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(17-25) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-36) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphate, phosphorus, total Kjeldahl nitrogen	(2-36) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Manganese, dissolved oxygen, phosphorus, nitrogen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more manganese samples due to the exceedance. <i>E. coli</i> needs sample/seasonal coverage.

Impairment Discussion
Remains impaired for low dissolved oxygen.

CENTERFIRE CREEK

Headwaters - Black River
15060101-356
8.7 Miles

Category 1
Attaining all uses

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 7/27/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FS RD #25	SRCTF004.17	103185	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

C

HERRY CREEK

Tributary at 340509 / 110560 - Salt River
15060103-015B
40.9 Miles

Category 1
Attaining all uses

Salt

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Attaining

No Exceedances

Monitoring Summary

Sampling period: 10/4/2007 - 5/23/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE DEVILS CHASM	SRCHE013.65	100442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(8) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(7-8) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-8) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Good core parameter coverage with few samples.

CHRISTOPHER CREEK

Headwaters - Tonto Creek
15060105-353
8.0 Miles

Category 4A/5
Not attaining/Impaired

Phosphorus (2006/8) and E. coli (2004)

FC - Inconclusive • FBC - Not Attaining • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	5/27/2008	6.77 mg/L	A&Wc is inconclusive with 4 exceedances in 17 samples (binomial).
		8/13/2009	6.71 mg/L	
		8/24/2010	6.21 mg/L	
		9/8/2010	6.02 mg/L	
E. coli	235 cfu/100 mL, SSM	9/3/2008	365 cfu/100 mL	FBC remains not attaining with 4 exceedances in 16 samples.
		8/14/2009	517 cfu/100 mL	
		9/30/2009	285 cfu/100 mL	
		7/12/2010	3629 cfu/100 mL	
Phosphorus	0.1 mg/L, Annual mean	7/12/2010	0.161 mg/L	A&Wc and FBC remain impaired with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 10/11/2006 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW CHRISTOPHER CREEK CAMPGROUND	SRCRS002.25	100365	ADEQ	TMDL
ABOVE TONTO CREEK AND BELOW BOX CANYON	SRCRS000.08	101034	ADEQ	TMDL
AT TOP OF BOX CANYON	SRCRS001.24	101033	ADEQ	TMDL
ABOVE RECREATION AREA	SRCRS006.20	101027	ADEQ	TMDL
ABOVE R-BAR-C SCOUT RANCH	SRCRS001.74	106060	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(44-60) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(6-64) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	Zinc (dissolved), cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more dissolved oxygen samples due to exceedances. Collect more samples in support of TMDL development and effectiveness monitoring.

Impairment Discussion
Not attaining for <i>E. coli</i> with TMDL approved in 2005. Remains impaired for phosphorus (2006/8). New data for this assessment shows exceedances in all the same parameters.

CONKLIN CREEK

Headwaters - Black River
15060101-026
7.4 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/2/2010 - 5/5/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD #25	SRCKN001.61	100521	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, (3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen, copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

COON CREEK (COO)

Tributary at 334642 / 110542 -- Salt River
15060103-039B
10.1 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 10/4/2007 - 6/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT FOREST ROAD #203	SRC00001.92	100379	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Nitrogen
Missing Seasonal Distribution	Nitrogen, phosphorus, <i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect <i>E. coli</i> , nitrogen and phosphorus to represent at least 3 seasons during an assessment period.

COTTONWOOD GULCH

Headwaters - Pinto Creek
15060103-891
1.9 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/11/2006 - 4/7/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW OUTFALL PV004	SRCTG000.39	103443	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus
Missing Seasonal Distribution	Dissolved oxygen, pH, nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	7/30/2010	980 cfu/100 mL	FBC is inconclusive with 1 exceedance in 3 samples. Note: This exceedance was storm-related.

Monitoring Summary

Sampling period: 7/30/2010 - 4/19/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST SERVICE ROAD 276	SRCOY003.95	108403	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect more <i>E. coli</i> samples due to the exceedance.

CRESCENT LAKE

15060101-0420
156.7 Acres

Category 5
Impaired

IMPAIRMENT STATUS

High pH (2002 EPA)

FC - Inconclusive • FBC - Impaired • AGI - Impaired
AGL - Impaired • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2 mg/L, SSM	8/7/2008	2.02 mg/L	A&Wc and FBC are inconclusive with 1 single sample maximum exceedance in 7 samples (binomial).
pH	9.0 SU	8/7/2008	9.4 SU	A&Wc, FBC, AGL and AGI remain impaired with 1 exceedance in 7 samples (binomial).
Dissolved Oxygen	7.0 mg/L	8/5/2010	6.51 mg/L	A&Wc is inconclusive with 1 exceedance in 6 samples (binomial).

Monitoring Summary

Sampling period: 11/18/2009 - 5/11/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
MID LAKE	SRCRE-B	100993	ADEQ	CLP
AT BOAT RAMP	SRCRE-BR	101320	ADEQ	SPS, CLP
AT DAM	SRCRE-A	108762	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Boron, copper, lead, manganese, mercury, selenium	(1-7) Ammonia, nitrate, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-7) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, dissolved oxygen
Missing Core Parameters	
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more pH, dissolved oxygen and nitrogen samples due to exceedances.

Impairment Discussion
EPA overfiled for pH in 2002.

DEER CREEK (D4E)

Headwater - Rye Creek
15060105-018
11.9 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/14/2011 - 3/14/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW HIGHWAY 87	SRD4E001.72	108682	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

DEVILS CHASM CREEK

Tributary at 334846 / 110523
15060103-801B
1.6 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	27.8 µg/L ^{acute} @ 240 mg/L hardness	9/21/2010	90 µg/L	A&Ww acute is inconclusive with 1 exceedance in 4 samples.
Nitrogen	0.6 mg/L, Annual mean	9/21/2010	0.64 mg/L	A&Ww and FBC are inconclusive with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 9/21/2010 - 6/1/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CHERRY CREEK	SRDEV000.38	100533	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved), nitrogen
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Beryllium, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect dissolved copper and total nitrogen samples due to exceedances.

FISH CREEK-LOWER SALT RIVER

Headwaters - Salt River
15060106A-583
16.3 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/12/2009 - 4/21/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
0.25 MILES ABOVE HIGHWAY 88	SRFSH006.38	100552	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-2) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

FISH CREEK-UPPER SALT RIVER

Headwaters - Black River
15060101-032
13.8 Miles

Category 2
Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 6/24/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR BEAR WALLOW WILDERNESS	SRFIS004.49	100553	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), zinc (dissolved), selenium

Priority	Monitoring Recommendations
Low	<i>E. coli</i> needs sample/seasonal coverage.

Five Point Mountain Tributary

Headwaters - Pinto Creek
15060103-885
2.9 Miles

Category 5
Impaired

Dissolved Copper (2006/8)

PBC - Inconclusive • A&We - Impaired

No Exceedances

Monitoring Summary

Sampling period: no samples

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
60W3	SRFPM002.24	102657	ADEQ	TMDL

Metals Samples	Nutrients & Related Samples	Other Samples
none	none	none

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All core parameters
Missing Seasonal Distribution	All core parameters
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Need more data. All core parameters need seasonal coverage.

Impairment Discussion
Remains impaired for dissolved copper (2006/8).

IMPAIRMENT STATUS

Copper (2006/8)
FC - Inconclusive • FBC - Inconclusive
A&Ww - Not Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper	1300 ug/L	8/7/2007	2300 ug/L	FBC is inconclusive with 4 exceedances in 4 samples (binomial).
		12/1/2007	6400 ug/L	
		12/11/2007	3900 ug/L	
		1/28/2008	4900 ug/L	
Copper ^d	14.7 ug/L ^{acute} , 9.7 ug/L ^{chronic} @ 110 mg/L hardness	8/7/2007	2200 ug/L	A&Ww remains not attaining with 3 exceedances in 3 samples.
	11.5 ug/L ^{acute} , 7.8 ug/L ^{chronic} @ 85 mg/L hardness	12/1/2007	3800 ug/L	
	7.3 ug/L ^{acute} , 5.1 ug/L ^{chronic} @ 52 mg/L hardness	12/11/2007	3500 ug/L	
pH	6.5 SU	12/11/2007	6.1 SU	A&Ww and FBC are inconclusive with 1 exceedance in 4 samples (binomial).

Monitoring Summary

Sampling period: 8/7/2007 - 1/28/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT PINTO CREEK	SRGIB000.11	101071	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, silver, thallium, zinc, selenium	(1) Nitrate, nitrite, nitrite/nitrate	(1-4) pH, SSC

Salt

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH, copper
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus, <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Copper (dissolved), lead (dissolved), nickel (dissolved), silver (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Need more samples to determine attainment status. All core parameters need coverage.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

PBC - Attaining • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	85.9 ug/L @ 400 mg/L hardness	4/7/2008	110 ug/L	A&We is attaining. No acute exceedances during the last 3 years of monitoring.

Monitoring Summary

Sampling period: 7/9/2006 - 10/14/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT WEIR	SRGDG000.03	102666	BHP	Permit Monitoring
NORTH OF #3 TAILING IMPOUNDMENT	SRGDG000.21	103442	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(7-9) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(1) Nitrite/nitrate	(4) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Nitrogen, phosphorus
Missing Seasonal Distribution	Nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Medium	Collect nitrogen and phosphorus samples to represent at least 3 seasons during an assessment period.

GORDON CANYON CREEK

Headwaters - Hog Canyon
15060105-336A
12.7 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 11/10/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ALONG COLCORD ROAD, NEAR YOUNG, AZ	SRGOD012.05	100377	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

H AIGLER CREEK

Headwaters - Trib at 341223 / 1110011
15060105-012A
15.4 Miles

Category 2
Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 10/21/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR FISHERMANS POINT ON FR200	SRHAG013.09	105442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

HANNAGAN CREEK

Headwaters - Beaver Creek
15060101-034
7.2 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 7/30/2007 - 6/24/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT HIGHWAY 191, NEAR ALPINE, AZ	SRHAN002.27	102149	ADEQ	Ambient
ABOVE BEAVER CREEK	SRHAN000.06	102141	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(7) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(7) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-7) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

FC - Attaining • FBC - Inconclusive • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2.0 mg/L, SSM	12/17/2007	2.76 mg/L	A&Ww and FBC are inconclusive with 1 exceedance in 2 samples (binomial).

Monitoring Summary

Sampling period: 8/28/2007 - 4/30/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
CARLOTA WEIR	SRHNC000.14	101072	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-3) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen
Missing Core Parameters	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect nitrogen samples to ascertain A&W attainment. Collect D.O., N , P , copper and ecoli samples to represent three seasons in assessment period to complete core parameter coverage.

HAY CREEK

Headwater - West Fork Black River
15060101-353
4.5 Miles

Category 1
Attaining all uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 6/17/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK BLACK RIVER	SRHAY000.04	101299	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

MILLER SPRINGS GULCH

Headwaters - Pinto Creek
15060103-892
1.6 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/11/2006 - 10/3/2006

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
HEADWATERS TO PINTO CREEK	SRMSG22.83	104979	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

PINAL CREEK

Lower Pinal Creek WTP discharge -- Salt River
15060103-280D
6.4 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
pH	6.5 SU	3/6/2007	6.03 SU	AGL, A&Ww, FBC are attaining with 9 exceedances in 70 samples (binomial)
		8/20/2007	5.55 SU	
		9/4/2007	6.12 SU	
		10/2/2007	5.3 SU	
		11/6/2007	6.17 SU	
		2/5/2008	5.14 SU	
		7/1/2008	6.28 SU	
		4/7/2009	6.04 SU	
		5/5/2009	6.17 SU	
Selenium	2 ug/L	9/2/2008	3 ug/L	A&Ww is inconclusive with 1 exceedance in 3 samples. Note: This is an estimated value below detection limit.

Monitoring Summary

Sampling period: 7/26/2006 - 12/2/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT INSPIRATION DAM	SRPNL003.79	100727	Pinal Creek Group	Permit Monitoring
USGS SITE JJ15	SRPNL005.12	101518	ADEQ, Pinal Creek Group	Ambient, Permit Monitoring
AT SETKA RANCH	SRPNL006.87	101491	Pinal Creek Group	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(16-94) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-98) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Selenium
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Beryllium (dissolved), cadmium (dissolved), copper (dissolved), selenium, cyanide, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more selenium samples to assess A&Wc attainment. Use lower detection limits for metals listed above.

Attainment Discussion
Additional data was submitted for this reach following the completion of the public comment period. The new dataset includes 9 exceedances in 70 samples occurred during the 2012/14 assessment window. Therefore, this reach is considered 'attaining' following the binomial rule. AGL, A&Ww and FBC are now 'attaining' for pH rather than being inconclusive. Reach status remains 'Attaining some uses', however, because of uncertainty over the status of A&Ww due to a selenium exceedance.

Pinto CreekHeadwaters - Tributary at 331927/1105456
15060103-018A
2.5 Miles**Category 4A**
Not attaining**Dissolved Copper (1998)**FC - Inconclusive • FBC - Inconclusive • A&Wc - Not Attaining
AGL - Inconclusive • AGI - Inconclusive**No Exceedances****M**onitoring Summary
Sampling period: no current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Simpson Dam	SRPNT033.02	102428	ADEQ	TMDL

Metals Samples	Nutrients & Related Samples	Other Samples
none	none	none

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
Low	All core parameters need coverage.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

IMPACTMENT STATUS

Copper (1998)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper	500 ug/L (AGL) 1300 ug/L (FBC)	12/1/2007	2000 ug/L	AGL and FBC are attaining with 2 exceedances and 1 exceedance, respectively in 19 samples (binomial).
		12/11/2007	700 ug/L	
Copper ^d	9 ug/L ^{acute} , 6 ug/L ^{chronic} @ 63 mg/L hardness	8/7/2007	31 ug/L	A&Ww remains not attaining with 6 exceedances in 11 sample.
	7 ug/L ^{acute} , 5 ug/L ^{chronic} @ 59 mg/L hardness	12/1/2007	220 ug/L	
	8 ug/L ^{acute} , 5 ug/L ^{chronic} @ 50 mg/L hardness	12/11/2007	530 ug/L	
	7 ug/L ^{acute} , 5 ug/L ^{chronic} @ 60 mg/L hardness	1/28/2008	200 ug/L	
	10 ug/L ^{acute} , 7 ug/L ^{chronic} @ 74 mg/L hardness	2/5/2008	103 ug/L	
	40 ug/L ^{chronic} @ 400 mg/L hardness	4/7/2008	60 ug/L	
Dissolved oxygen	6.0 mg/L	7/11/2006	5.26 mg/L	A&Ww is inconclusive with 2 exceedances in 7 samples (binomial).
		1/23/2007	2.67 mg/L	
Lead	15 ug/L	12/1/2007	38 ug/L	FBC is inconclusive with 1 exceedance in 4 samples (binomial).
pH	6.5 SU	12/1/2007	6.15 SU	AGL, AGI, and FBC are attaining with 1 exceedance in 12 samples (binomial).
SSC	80 mg/L	1/28/2008	800 mg/L	A&Ww is inconclusive.

Monitoring Summary

Sampling period: 7/11/2006 - 12/26/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
300 FEET DOWN-STREAM OF IRON BRIDGE	SRPNT019.23	103313	BHP	Permit Monitoring
BELOW CARLOTA CACTUS BRECCIA	SRPNT023.29	102431	ADEQ	TMDL
ABOVE GIBSON MINE TRIBUTARY	SRPNT028.85	101062	ADEQ	TMDL
AT OLD HIGHWAY 60	SRPNT027.51	101064	ADEQ	TMDL
ABOVE COTTONWOOD GULCH AND BELOW CACTUS BRECCIA	SRPNT024.85	103311	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(6-27) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(2) Nitrate, nitrite, nitrite/nitrate	(2-18) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen, lead, SSC
Missing Core Parameters	Nitrogen, phosphorus, <i>E. coli</i>
Missing Seasonal Distribution	Nitrogen, phosphorus, <i>E. coli</i> , boron, lead
Lab Detection Limits Not Low Enough	Arsenic, arsenic (dissolved), cadmium (dissolved), copper (dissolved), lead, lead (dissolved), nickel (dissolved), selenium, silver (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
High	Use a lower lab reporting limit for selenium.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

PINTO CREEK

West Fork Pinto Creek - Roosevelt Lake
15060103-018C
18.4 Miles

Category 4A/5
Not attaining/Impaired

Salt

Selenium (2004) and copper (1998)

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Ww - Impaired

No Exceedances

Monitoring Summary

Sampling period: 8/27/2007 - 10/20/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE HENDERSON FORD	SRPNT008.48	100346	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Selenium, mercury (dissolved)

Priority	Monitoring Recommendations
High	Collect selenium samples in support of TMDL development and <i>E. coli</i> to complete core parameter coverage.

Impairment Discussion
Remains impaired for selenium and not attaining for copper. Pinto Creek copper TMDL completed in 2001.

POWERS GULCH

Headwaters - Haunted Canyon
15060103-884
3.8 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	53.5 ug/L @ 242 mg/L hardness	2/13/2008	66 ug/L	A&We is inconclusive with 1 exceedance in 5 samples.

Monitoring Summary

Sampling period: 7/11/2006 - 10/14/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR HAUNTED CANYON	SRPWG000.15	102665	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus
Missing Seasonal Distribution	Dissolved oxygen, pH, nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Arsenic (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect dissolved copper samples due to the exceedance. Collect pH, dissolved oxygen, nitrogen, & phosphorus samples to reflect 3 seasons over assessment period to complete core parameter coverage.

RESERVATION CREEK

Indian Reservation - Black River
15060101-010
3.3 Miles

Category 3
Inconclusive

Salt

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/2/2010 - 5/5/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BLACK RIVER	SRRES000.33	100629	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

REYNOLDS CREEK

Headwaters - Workman Creek
15060103-202
6.8 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/8/2011	3.94 mg/L	A&Wc is inconclusive with 1 exceedance in 4 samples (binomial).
<i>E. coli</i>	235 cfu/100 ml, SSM	9/22/2010	525 cfu/100 mL	FBC is inconclusive with 1 exceedance in 4 samples.
Nitrogen	0.6 mg/L, Annual mean	9/22/2010	0.712 mg/L	A&Wc and FBC are inconclusive with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 9/22/2010 - 6/8/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW MCFADDEN CREEK	SRREY001.14	100630	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, dissolved oxygen, <i>E. coli</i>
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect dissolved oxygen, <i>E. coli</i> , and total nitrogen samples due to exceedances.

Mercury in fish tissue (2006/8 EPA)

DWS - Inconclusive • FC - Impaired • FBC - Inconclusive

AGI - Inconclusive • AGL - Inconclusive

A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	19.7 ug/L ^{acute} , 12.7 ug/L ^{chronic} @ 150 mg/L hardness	5/5/2009	20 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Dissolved oxygen	6.0 mg/L	9/24/2007	5.47 mg/L	A&Ww is attaining with 1 exceedance in 11 sample (binomial).
pH	9.0 SU	7/21/2008	9.3 SU	AGI, AGL, A&Ww, DWS, and FBC are inconclusive with 2 exceedances in 8 samples (binomial).
		9/22/2008	9.5 SU	
Phosphorus	0.06 mg/L, SSM	2/12/2008	0.108 mg/L	A&Ww and FBC are attaining with 1 exceedance in 12 samples (binomial).

Monitoring Summary

Sampling period: 9/24/2007 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Dam	SRR00-A	100075	ADEQ, AGFD	CLP
Salt River Inlet	SRR00-B	100076	ADEQ, AGFD	CLP
Northeast Of Boat Ramp	SRR00-C2	106243	ADEQ	CLP
Tonto Creek Inlet	SRR00-C	100077	ADEQ	CLP
At Marina	SRR00-MAR	101711	UA, ADEQ	CLP
Below Bumblebee Creek Off Highway 188	SRR00-B1	104417	ADEQ	CLP
At Salt River Inlet	SRR00-SAL	108822	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(19-23) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(4-23) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(24-27) Dissolved oxygen, pH, total dissolved solids,

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH, copper (dissolved)
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more pH and dissolved copper samples due to exceedances. Collect fish tissue samples in support of TMDL development.

Impairment Discussion
EPA overfiled for mercury in fish tissue (2006/8).

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/14/2011 - 3/14/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW RYE AZ.	SRRYE006.15	102833	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
 AGI - Attaining • AGL - Attaining • A&Ww - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	10/11/2006	2 mg/L	A&Ww is attaining with 3 exceedances in 16 samples (binomial).
		9/27/2007	4.2 mg/L	
		7/31/2008	2.92 mg/L	
pH	9.0 SU	5/29/2008	9.4 SU	AGI, AGL, A&Ww, DWS, and FBC are attaining with 3 exceedances in 16 samples (binomial).
		6/19/2008	9.2 SU	
		7/31/2008	9.7 SU	
Thallium	2 ug/L (DWS)	2/26/2008	34 mg/L	DWS, FBC, and FC are inconclusive with 1 exceedance in 6 samples (binomial).
Nitrogen	1 mg/L, SSM 0.03 mg/L, Annual mean	1/29/2008	1.75 mg/L	A&Ww & FBC are attaining with 3 exceedances in 16 samples (binomial). 3 numeric annual mean exceedances were not composites at 1,2, & 5 meters as required.
		3/19/2008	1.34 mg/L	
		4/9/2008	1.06 mg/L	
		7/06-6/07	0.33 mg/L	
		7/07-6/08	0.43 mg/L	
		7/08-6/09	0.23 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual mean	10/11/2006	0.068 mg/L	A&Ww & FBC are inconclusive with 6 exceedances in 16 samples (binomial). 3 numeric annual average exceedances though none were composites at 1,2, & 5 meters as required.
		12/4/2007	0.08 mg/L	
		1/29/2008	0.42 mg/L	
		2/26/2008	0.097 mg/L	
		3/19/2008	0.09 mg/L	
		4/9/2008	0.08 mg/L	
		7/06-6/07	0.045 mg/L	
		7/07-6/08	0.077 mg/L	
		7/08-6/09	0.035 mg/L	

Monitoring Summary

Sampling period: 9/13/2006 - 5/12/2009

Salt

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
850 METERS ACROSS FROM BUTCHER JONES SITE	SRSAG-NLS	105800	ADEQ	CLP
AT DAM	SRSAG-A	100082	ADEQ	CLP
SOUTHEAST OF BAGLEY FLAT	SRSAG-C	101810	ADEQ	CLP
AT MARINA SITE 2	SRSAG-MAR2	100995	ADEQ	CLP
AT CAMPGROUND	SRSAG-MFLAT	101698	AGFD	CLP
MID LAKE SITE	SRSAG-B	104397	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(19-23) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-42) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphate, phosphorus, total Kjeldahl nitrogen	(22-42) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Thallium, phosphorus
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium, thallium

Priority	Monitoring Recommendations
Medium	Collect more nitrogen, phosphorus, and thallium samples due to exceedances.

SALT RIVER

Canyon Creek - Cherry Creek
15060103-007
19.6 Miles

Category 5
Impaired

Add selenium to the 303(d) list.

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Selenium	2 ug/L	7/19/2010	2.2 ug/L	A&Ww chronic is impaired with 2 exceedances.
		5/25/2011	2.9 ug/L	

Monitoring Summary

Sampling period: 7/19/2010 - 5/25/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT GLEASON FLAT	SRSLR139.75	108422	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved)

Priority	Monitoring Recommendations
High	Collect selenium samples in support of TMDL development.

Impairment Discussion

Relatively high turbidity and TSS on 7/19 may indicate upset (i.e. non-chronic) conditions. 1.3 inches of rain in Globe on the 17Th, 0 on the 18th and .25 on the 19th and precipitation map shows widespread rain in area (see documentation).

E. coli, phosphorus, and nitrogen (2010) and SSC (2006/8)

FC - Attaining • FBC - Impaired • AGI - Attaining
 AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	8/15/2006	7100 cfu/100 mL	FBC remains impaired with 2 exceedances in 14 samples.
		12/4/2007	1600 cfu/100 mL	
Lead	15 ug/L	8/15/2006	32.8 ug/L	FBC is attaining with 2 exceedances in 14 samples (binomial).
		1/29/2008	25.9 ug/L	
SSC	80 mg/L	8/15/2006	2520 mg/L	A&Ww is attaining with no median exceedances. All single sample exceedances except 3/20/2007 occurred during storm events and were excluded from assessment.
		3/20/2007	102 mg/L	
		9/11/2007	631 mg/L	
		12/4/2007	488 mg/L	
		1/29/2008	3470 mg/L	
Nitrogen	0.6 mg/L, Annual mean 2.0 mg/L, SSM	8/06 - 6/07	1.013 mg/L	A&Ww and FBC remain impaired with 2 annual mean exceedances.
		9/07 - 6/08	0.976 mg/L	
		8/15/2006	4.75 mg/L	
		1/29/2008	3.18 mg/L	
Phosphorus	0.12 mg/L, Annual mean 1.0 mg/L, SSM	8/06 - 6/07	0.203 mg/L	A&Ww and FBC remain impaired with 2 annual mean exceedances.
		9/07 - 6/08	0.54 mg/L	
		1/29/2008	2.44 mg/L	
Mercury ^d	0.01 ug/L	4/11/2007	0.012 ug/L	A&Ww chronic is inconclusive with 1 exceedance.

Monitoring Summary

Sampling period: 8/15/2006 - 12/2/2008

Salt

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
Above Lake Roosevelt	SRSLR107.43	100745	USGS	USGS

Metal Samples	Nutrients & Related Samples	Other Samples
(14) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(14) Nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(14) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Mercury (dissolved)
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development.

Impairment Discussion
The reach is impaired for <i>E. coli</i> , ssc, nitrogen and phosphorus.

SALT RIVER

Stewart Mountain Dam - Verde River
15060106A-003
10.1 Miles

Category 5
Impaired

IMPAIRMENT STATUS

Dissolved oxygen (2004)

DWS - Attaining • FC - Attaining • FBC - Inconclusive
AGI - Attaining • AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/24/2006	3 mg/L	A&Ww remains impaired with 3 exceedances in 7 samples (binomial).
		7/25/2007	5.5 mg/L	
		9/24/2008	5.7 mg/L	
Phosphorus	0.05 mg/L, Annual mean	8/06 - 5/07	0.052 mg/L	A&Ww and FBC are inconclusive. Need more data for impairment determination.
		7/08 - 12/08	0.057 mg/L	
Nitrogen	3 mg/L, SSM	4/14/2008	4.3 mg/L	A&Ww and FBC are attaining with 2 exceedance in 35 samples (binomial). No annual average exceedances (time frame for calculation changed from 2010).
		5/12/2008	3.7 mg/L	
SSC	80 mg/L	5/9/2007	531 mg/L	A&Ww is attaining with no median exceedances in 10 samples.
		12/12/2007	136 mg/L	

Monitoring Summary

Sampling period: 7/11/2006 - 12/8/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW STEWART MOUNTAIN DAM	SRSLR051.32	100746	USGS	USGS
BELOW STEWART MOUNTAIN DAM	SRSLR054.32	103131	SRP	SRP

Metal Samples	Nutrients & Related Samples	Other Samples
(21-40) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(10-40) Nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(40) Dissolved oxygen, <i>E. coli</i> , naphthalene, pH, SSC, total dissolved solids, styrene, , tetrachloroethylene, toluene, trichlorobenzene, trichloroethane 111, trichloroethane 112, trichloroethylene, trihalomethanes, vinylchloride, xylene, tetrachloroethane

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Dibromochloropropane, selenium, tetrachloroethane, hexachlorobutadiene

Priority	Monitoring Recommendations
High	Collect more dissolved oxygen samples in support of TMDL development. Collect more phosphorus samples due to exceedances.

Impairment Discussion
Remains impaired for dissolved oxygen (2004).

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
 A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 5/20/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
1.3 MILES ABOVE BLACK RIVER	SRSNK001.33	101298	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 11/5/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BRYANT CANYON	SRSPI011.63	100651	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), nickel (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

STINKY CREEK

Headwaters - Fort Apache Res
15060101-352A
2.1 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/18/2008	4.24 mg/L	A&Wc is inconclusive with 1 exceedance in 2 samples (binomial).
SSC	25 mg/L	7/30/2007	30 mg/L	A&Wc is inconclusive. Not enough samples to calculate a median.

Monitoring Summary

Sampling period: 7/30/2007 - 6/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK BLACK RIVER	SRSTI000.38	101303	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-3) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen, SSC
Missing Core Parameters	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen and SSC samples due to exceedances. Most core parameters need seasonal distribution coverage, many need sample number coverage as well.

THOMPSON DRAW

Headwaters - Billy Creek
15060105-378
7.1 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	576 cfu/100 mL, SSM	7/23/2010	1724 cfu/100 mL	PBC is inconclusive with 1 exceedance in 2 samples. Note: This exceedance is storm-related.

Monitoring Summary

Sampling period: 3/4/2008 - 7/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DOWN STREAM FROM THOMPSON SUB DIVISION	SRTH0003.23	106365	ADEQ	TMDL
UP STREAM FROM THOMPSON SUB DIVISION	SRTH0003.94	106366	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Antimony, arsenic, barium, beryllium, boron, cadmium, lead, manganese, mercury, selenium, zinc	(2) Ammonia, nitrogen, total Kjeldahl nitrogen	(2-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect <i>E. coli</i> samples due to the exceedance.

TONTOK CREEK (TON)

Greenback Creek - Roosevelt Lake
15060105-004
2.6 Miles

Category 5
Impaired

Salt

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive
EPA FC - Impaired

No Exceedances

Monitoring Summary

Sampling period: 11/10/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT GREENBACK CREEK CONFLUENCE	SRTON011.00	108542	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
EPA overfile for mercury in fish tissue (2010)

TONTO CREEK (TON)

Haigler Creek - Spring Creek
15060105-011
7.8 Miles

Category 5
Impaired

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive
EPA FC - Impaired

No Exceedances

Monitoring Summary

Sampling period: 10/12/2007

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
Below Haigler Creek, At Hellsgate	SRTON046.90	100669	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
EPA overfile for mercury in fish tissue (2010)

Mercury in fish tissue (EPA 2010)

Impairment

Not Assessed
EPA FC - Impaired

Status

No Exceedances

Monitoring Summary
not assessed

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
TONTO CREEK - ABOVE USGS GAGE ABOVE GUN CREEK	SRTON019.37	100349	ADEQ	FSN
Metals Samples		Nutrients & Related Samples		Other Samples

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
High	Collect fish tissue samples and water quality samples for source identification.

Impairment Discussion
No available water quality data within assessment period. EPA overfile for mercury in fish tissue.

Tonto Creek
 Rye Creek to Gun Creek
 15060105-008
 18.6 Miles

Category 5
 Impaired

Mercury in fish tissue (EPA 2010)

Impairment

Not Assessed

EPA FC - Impaired

Status

No Exceedances

Monitoring Summary

not assessed

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose

Metals Samples	Nutrients & Related Samples	Other Samples

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
High	Collect fish tissue samples and water quality samples for source identification.

Impairment Discussion
No established sampling site, no available water quality data within assessment period. EPA overfile for mercury in fish tissue.

TONTO CREEK (TON)

Headwaters - Tributary at 34 18 10 / 111 04 14
15060105-013A
8.1 Miles

Category 4A/5
Not attaining/Impaired

Salt

*Low dissolved oxygen (2006),
nitrogen (2004 EPA), and E. coli (2004)*

FC - Attaining • FBC - Not Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	10/11/2006	5.92 mg/L	A&Wc remains impaired with 4 exceedances in 23 samples (binomial).
		10/24/2006	6.68 mg/L	
		7/8/2008	5.98 mg/L	
		8/12/2008	5.71 mg/L	
E. coli	235 cfu/100 mL, SSM	8/12/2008	325.5 cfu/100 mL	FBC remains not attaining with 2 exceedances in 22 samples.
		6/30/2011	365.4 cfu/100 mL	
pH	6.5 SU	8/24/2010	6.13 SU	AGL, A&Wc, and FBC are attaining with 1 exceedance in 24 samples (binomial).
Nitrogen	0.5 mg/L, Annual mean 2.0 mg/L, SSM	7/2010 - 5/2011	0.52 mg/L	A&Wc remains not attaining with 1 annual mean exceedance and 1 single sample maximum.
		10/11/2006	3.05 mg/L	

Monitoring Summary

Sampling period: 10/11/2006 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW AGFD HATCHERY MIXING ZONE	SRTON062.28	101017	ADEQ	TMDL
BELOW CHRISTIAN CAMP ROAD	SRTON060.50	100352	ADEQ	TMDL
BELOW HORTON CREEK	SRTON059.43	100353	ADEQ	Ambient
BELOW TONTO SPRING	SRTON062.89	101016	ADEQ	TMDL
BELOW KOHLS RANCH	SRTON057.70	100929	ADEQ	TMDL

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE HIGHWAY 260 AT KOHLS RANCH	SRTON058.63	100354	ADEQ	TMDL
DOWN STREAM OF CHRISTIAN CAMP TRIBUTARY	SRTON060.28	106059	ADEQ	TMDL
ABOVE CHRISTIAN CAMP	SRTON061.37	101018	ADEQ	TMDL
BELOW TONTO FISH HATCHERY OUTFALL	SRTON062.65	108443	ADEQ	Ambient
ABOVE CHRISTOPHER CREEK	SRTON056.59	100359	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(2-6) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(72-98) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(15-105) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development and effectiveness monitoring.

Impairment Discussion
Remains impaired for dissolved oxygen and not attaining for nitrogen and <i>E. coli</i> . Nutrient (2005) and <i>E. coli</i> (2004) TMDLs completed.

TONTO CREEK (TON)

Spring Creek - Rye Creek
15060105-009
19.5 Miles

Category 5
Impaired

Salt

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive

EPA FC - Impaired

No Exceedances

Monitoring Summary

Sampling period: 9/3/2008 - 8/26/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT OLD GAGING STATION ABOVE HOUSTON CREEK	SRTON032.38	107462	ADEQ	TMDL
DOWNSTREAM OF HOUSTON CREEK	SRTON031.72	106722	ADEQ	TMDL
US OF HOUSTON CREEK AT THE NARROWS	SRTON032.62	100668	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, phosphorus, cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
EPA overfile for mercury in fish tissue (2010)

TONTOK CREEK (TON)

Tributary @ 341810/1110414 - Haigler Creek
15060105-013B
8.5 Miles

Category 4A/5
Not attaining/Impaired

*Nitrogen (EPA 2004), E. coli (2004),
Mercury in fish tissue (EPA 2010)*

FC - Attaining • FBC - Not Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Not Attaining
EPA FC - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	7/7/2008	461 cfu/100 mL	FBC remains not attaining with 5 exceedances in 20 samples.
		8/12/2008	866 cfu/100 mL	
		9/3/2008	1299 cfu/100 mL	
		7/12/2010	3629 cfu/100 mL	
		7/23/2010	3628 cfu/100 mL	
Nitrogen	0.5 mg/L, Annual mean 2.0 mg/L, SSM	7/2010 - 6/2011	1.4 mg/L	A&Ww and FBC remain not attaining with 1 annual mean exceedance.
		7/23/2010	8.9 mg/L	
		9/8/2010	3.3 mg/L	
Phosphorus	0.1 mg/L, Annual mean 0.8 mg/L, SSM	8/2008 - 4/2009	0.13 mg/L	A&Ww and FBC are inconclusive. Need more data for impairment determination.
		7/2010 - 6/2011	0.106 mg/L	
		7/23/2010	4.1 mg/L	

Monitoring Summary

Sampling period: 10/11/2006 - 6/29/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BEAR FLATS	SRTON055.09	100357	ADEQ	TMDL
BELOW BEAR FLATS	SRTON053.87	100358	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(30-34) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(8-38) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved)
Lab Detection Limits Not Low Enough	Mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development and effectiveness monitoring. Collect more phosphorus samples due to exceedances.

Impairment Discussion
Remains not attaining for nitrogen and for E. coli. EPA overfile for mercury in fish tissue (2010).

TRIB (UT1) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-647
1.2 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/19/2008 - 3/19/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
CHRISTIAN CAMP	SRUT1000.01	106363	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, <i>E. coli</i> , pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB (UT2) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-365
1.8 Miles

Category 3
Inconclusive

Salt

FC - Inconclusive • FBC - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 5/2/2008 - 7/8/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE MOUTH POINT	SRUT2000.01	106682	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(0) None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB (UTO) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-372
2.9 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/4/2008 - 3/4/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
FROM WEST SIDE OF TONTO CREEK ROAD	SRUTO000.02	106362	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB TO CHRISTOPHER CREEK

Headwaters - Christopher Creek
15060105-362
2.4 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 3/4/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
R-BAR-C TRIB	SRUCR000.01	106364	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB TO THOMPSON DRAW

Headwaters - Thompson Draw
15060105-379
0.8 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/23/2010 - 7/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FR 405 CROSS-ING	SRUTD000.10	108462	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

WEST FORK PINTO CREEK

Headwaters - Pinto Creek
15060103-066
11.6 Miles

Category 2
Attaining some uses

Salt

FBC - Inconclusive • A&Ww - Inconclusive • FC - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2.0 mg/L, SSM 0.6 mg/L, Annual mean	12/17/2007	2.94	A&Ww and FBC are inconclusive with 1 SSM exceedance in 6 samples (binomial) and 1 annual mean exceedance.
		12/2007 - 6/2008	0.89	
Bottom Deposits	< 50% fines	9/30/2008	51%	A&Ww is inconclusive with 1 exceedance.

Monitoring Summary

Sampling period: 12/17/2007 - 6/2/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW KENNEDY RANCH	SRWPN004.47	102433	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(6) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(6) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-7) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids, bottom deposits

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, bottom deposits
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect more total nitrogen samples due to exceedances. Good core parameter coverage with few samples.

WORKMAN CREEK

Headwaters - Reynolds Creek
15060103-195A
7.1 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	8/29/2007	6.71 mg/L	A&Wc is inconclusive with 1 exceedance in 4 samples (binomial).

Monitoring Summary

Sampling period: 8/29/2007 - 11/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FALLS	SRWRK007.97	100696	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect more dissolved oxygen samples due to the exceedance. <i>E. coli</i> needs sample/seasonal coverage.

San Pedro Watershed

Watershed Description

This watershed encompasses three hydrological areas:

- San Pedro River, which begins in the mountains near Cananea Sonora, Mexico, and flows north about 100 miles through the southeast corner of Arizona to join the Gila River near Winkelman, Arizona;
- Willcox Playa, a terminal basin (does not drain out of the area), which contains a 30,000 acre ephemeral lake (playa); and
- Two relatively short drainages that flow to the Rio Yaqui in Mexico: Whitewater Draw and Black Draw.

It is a 7,015 square mile watershed is lightly populated with only 130,000 people (2000 census). Communities in the area include the rapidly growing Sierra Vista area and several historic towns, such as Tombstone, Douglas, and Bisbee. Grazing is widespread, with significant areas of irrigated agriculture located on the eastern side of the watershed. Historic copper, silver, and gold mining took place across the watershed; however, only a few mines are still active. Land ownership is divided approximately as: 40% private, 40% state, 20% federal (no tribal land). The Bureau of Land Management established a 50,000 acre San Pedro Riparian National Conservation Area in 1988 to protect this critical habitat.

Elevation varies from 4,000 feet (above sea level), with desert grassland and warmwater aquatic communities, to 10,700 feet at Mount Graham, with alpine forest. Areas above 5,000 feet typically support coldwater aquatic communities where perennial waters exist.

Water Resources

The area gets little precipitation, with 10-15 inches of rain and 0-5 inches of snow. Springs provide perennial flow to segments of the San Pedro River and other streams in this watershed. Concerns have been raised about ground water pumping and water demand in the rapidly growing Fort Huachuca Army Base – Sierra Vista area and the potential impact on perennial flow in the San Pedro River. In 2003, a Fort Huachuca Preservation Legislation required the Secretary of Interior to develop water use management and conservation measures necessary to restore and maintain the sustainable yield of the aquifer.

An estimate of surface water resources in the Salt Watershed is provided in the following table.

Estimated Surface Water Resources in the San Pedro Watershed

	Perennial	Intermittent	Ephemeral
Stream miles	195	665	6,610
	Perennial	Non-perennial	
Lake acres	1,319	29,471	

Estimated miles and acres are based on U.S. Geological Survey digitized hydrology at 1:100,000 and have been rounded to the nearest 5 miles or 5 acres. Ambient monitoring focuses on perennial waters; however, special investigations have identified water quality problems on intermittent and even ephemeral waters.

Assessments

The San Pedro Watershed can be separated into the following drainage areas (subwatersheds):

15050201	Willcox Playa
15050202	Upper San Pedro
15050203	Lower San Pedro
15080301	Whitewater Draw
15080302	San Bernardino Valley

These drainage areas and the surface waters assessed as “attaining” or “impaired” are illustrated on the following watershed map. Methods used to complete these assessments are described in the “Surface Water Assessment Methods and Technical Support” document.